

1-2007

The Play's the Thing: A Theory of Taxing Virtual Worlds

Bryan T. Camp

Follow this and additional works at: https://repository.uchastings.edu/hastings_law_journal



Part of the [Law Commons](#)

Recommended Citation

Bryan T. Camp, *The Play's the Thing: A Theory of Taxing Virtual Worlds*, 59 HASTINGS L.J. 1 (2007).

Available at: https://repository.uchastings.edu/hastings_law_journal/vol59/iss1/1

This Article is brought to you for free and open access by the Law Journals at UC Hastings Scholarship Repository. It has been accepted for inclusion in Hastings Law Journal by an authorized editor of UC Hastings Scholarship Repository. For more information, please contact wangangela@uchastings.edu.

Articles

The Play's the Thing: A Theory of Taxing Virtual Worlds

BRYAN T. CAMP*

INTRODUCTION.....	2
I. THE VIRTUAL WORLDS OF MASSIVELY MULTIPLAYER ONLINE ROLE- PLAYING GAMES (MMORPGS).....	3
A. STRUCTURED AND UNSTRUCTURED MMORPGS	4
1. <i>Structured Games</i>	4
2. <i>Unstructured Games</i>	7
B. INCOME-GENERATING ACTIVITIES.....	8
1. <i>In-World Transactions (IWT)</i>	9
2. <i>Real Money Trades (RMT)</i>	12
II. BASIC TAX PRINCIPLES	14
A. CONSTITUTIONAL LIMITS ON THE LEGAL CONCEPT OF INCOME	16
B. OPERATIONAL LIMITS ON LEGAL CONCEPT OF INCOME.....	21
1. <i>Priceless</i>	25
2. <i>Realization</i>	29
a. <i>Realization of Income from Services</i>	30
b. <i>Realization of Income from Property</i>	33
3. <i>Imputed Income</i>	37
a. <i>Imputed Income from Services</i>	37
b. <i>Income Imputed from Property</i>	42

* Professor of Law, Texas Tech University School of Law. I am deeply indebted to the following brave souls who provided substantial constructive critiques and challenges to the ideas in this paper: Richard Bartle, Andrew Schwarz, and Timothy Taylor. I am also very grateful to the following for their insights and helpful discussions: Michael Altendorf, Christopher Bruner, Molly Campbell, Ted Castronova, Steven Chung, Bryn Davies, Julian Dibbell, Joshua Fairfield, Leandra Lederman, Thomas Malaby, Ted Seto, and Michael Warneke. I heap praise on the organizers and participants of State of Play IV, held in December 2006 at the New York School of Law, who allowed me to crash their party and present some reasons why having too much fun might lead to taxable income. Finally, I thank all those who post and comment on the Terra Nova blog for allowing me to test ideas and not laughing me off the board. All of the above added considerable value to this Article, which doubtless still contains many errors, for which I take full responsibility.

4. Summary	44
III. APPLICATION OF TAX PRINCIPLES TO VIRTUAL WORLDS	44
A. TAXING RMT (THE CASH OUT RULE)	45
B. TAXING IN-WORLD TRANSACTIONS	47
1. Priceless	49
2. Realization	49
a. The Cyberproperty Debate	50
b. Analysis of Realization Argument	54
3. Imputed Income: The Play Is the Thing	60
4. When Imputed Income Becomes Gross	66
CONCLUSION	70

INTRODUCTION

Taxation is shadow life. As our culture monetizes more and more life activities, the shadow grows. This Article looks at the potential tax issues arising from a new life activity: online role-playing games in virtual worlds. Currently, some thirty million people regularly play such games and the number is growing.¹ Exploring the reach of the Tax Code into virtual world transactions not only responds to the potentially practical needs of millions of U.S. taxpayers, it also permits a reevaluation of core principles of income tax as they interplay with life activities in the context of twenty-first century American culture.

This Article's central thesis is that while player activity in virtual worlds undoubtedly produces measurable economic value to the player, player activity that occurs solely within the online virtual world is not gross income under current doctrine, nor should current doctrine change. The Article argues that a "cash out" rule for determining gross income is the appropriate rule, both descriptively and normatively. Players whose added wealth consists solely in what I shall define as "units of play" should not be taxed unless and until they convert those units into cash or property that is something other than a unit of play. Conversely, players whose in-world wealth becomes less like units of play and more like a medium of exchange can and should count virtual world transactions as producing gross income. When the play ceases, taxation begins. The

1. Julian Dibbell, *The Life of the Chinese Gold Farmer*, N.Y. TIMES MAG., June 17, 2007, at 36. The best educated guess on the number of players comes from Bruce Woodcock, see *An Analysis of MMOG Subscription Growth*, <http://mmogchart.com/Analysis.html> (last visited Oct. 31, 2007), who put the number at 12.5 million in June 2006. Subscription information is closely guarded by game developers. *Id.* While a breakdown of U.S. citizen players for all games is not available it seems reasonable to suspect that they comprise a substantial fraction of the total since Woodcock estimates that about 30% of the subscribers to the single largest online game, World of Warcraft, are Americans. *Id.*

resulting line-drawing difficulties have nothing to do with the intent of the player and have nothing to do with “fun” and “games.” Instead, the issue presented is as old as the Tax Code itself: at what point does economic gain become taxable gain? The new context of virtual worlds allows for a renewed exploration of how and why the legal concept of “income” differs, and indeed must differ, from the economic concept.

The Article proceeds in three parts. Part I describes the relevant facts of online role-playing games. It describes two popular virtual worlds which sit at opposite ends of the spectrum of online gaming—World of Warcraft and Second Life—and describes how two types of game-related activity in each produce economic income to players. Part II reviews the basic rules of income taxation in the United States federal system. It explains the potential broadness of the term “gross income” in § 61 of the Internal Revenue Code (“I.R.C.”) and introduces three concepts that form important doctrinal limits to the term. Part II argues that these doctrinal limits, whether imposed by Congress, the courts, or the IRS, are best thought of as operational limits, arising not so much from economic theory as from a practical need to promote voluntary compliance and prevent government overreach. Part III applies the basic tax rules described in Part II to virtual worlds and advances a theory based on “units of play” to distinguish between virtual worlds used for play and those that have become the equivalent of barter clubs. Part III uses the concept of imputed income to discuss when in-world economic activity—the trade of purely virtual goods or services for virtual money—will cast a real world tax shadow.²

I. THE VIRTUAL WORLDS OF MASSIVELY MULTIPLAYER ONLINE ROLE-PLAYING GAMES (MMORPGs)

Role-playing games have existed in some form online since the early days of the Internet; but they have expanded enormously as game developers have created extraordinarily rich graphical representations of virtual worlds.³ In a role-playing game, a player uses an online persona, called an avatar, to assume a role within the context of the game environment and plays the game from within that role. This part first offers a typology for role-playing games. It then describes two types of activity that create economic value to the player and raise interesting tax questions.

2. For a well-considered argument that one virtual world, Second Life, already casts such a real world tax shadow, see Leandra Lederman, *Stranger Than Fiction: Taxing Virtual Worlds*, 92 N.Y.U. L. REV. (forthcoming 2007).

3. F. Gregory Lastowka & Dan Hunter, *The Laws of the Virtual Worlds*, 92 CAL. L. REV. 1, 14–29 (2004) (reviewing history of virtual worlds).

A. STRUCTURED AND UNSTRUCTURED MMORPGs

Role-playing games fall along a continuum from highly structured games to highly unstructured games. A structured game presents its players with pre-set roles and pre-set challenges and objectives. It generally sets complex rules for player interaction both with players and with computer-generated non-player characters (NPCs). In deistic terms, the game creators are like the Greek gods, constantly intervening in the lives of the avatars, both to hinder and to help them achieve the objectives of the game which, like Greek mythology, generally involves fighting, quests, and conquests. In contrast, an unstructured game has few rules, no objectives, and no pre-set roles. In deistic terms, the game creators are like the Enlightenment's benign watchmaker God, who built the world but otherwise pretty much leaves it alone. An example of an online game located at each end of the spectrum will serve to illustrate the subsequent discussion of tax issues.

1. *Structured Games*

World of Warcraft (WoW) is an example of a highly structured role-playing game. Launched in 2004, it currently has some 8.5 million subscribers worldwide, including between 1.5 and 2 million in North America.⁴ A WoW subscriber can choose to play one of several character roles, such as a druid, hunter, warrior, or mage. Players play these roles through virtual representations of self, commonly called avatars. In WoW, a player's avatar may take one of many life forms, such as human, dwarf, orc, troll, etc. Players in WoW can also give their avatars up to two primary professions, such as herbalism, alchemy, mining, blacksmithing, etc. Thus, one might choose to be a human warrior whose two primary professions are mining and blacksmithing. When one is not off fighting beasts one might be finding ore, acquiring other ingredients, and then using the pre-defined "recipes" at a village forge to "make" a virtual sword.

Several aspects of WoW put it at the structured end of the structured/unstructured curve. First, characters are highly structured. WoW puts players into strongly pre-defined roles within the context of an overall storyline. Warriors have certain traits. Paladins have others. You cannot mix and match. Each role brings with it pre-programmed strengths and weaknesses. Players engage in quests—to find treasure, slay monsters and dragons, rescue NPCs, fight for their Guild, faction, or

4. See Press Release, Blizzard Entertainment, World of Warcraft: The Burning Crusade Continues Record-Breaking Sales Pace (Mar. 7, 2007) (available at <http://www.blizzard.com/press/070307.shtml>). My description of WoW comes from my own tours of the game, discussions with gamers, the official game guide, see World of Warcraft Game Guide, <http://www.worldofwarcraft.com/info/> (last visited Oct. 31, 2007), and from World of Warcraft—Wikipedia, The Free Encyclopedia, http://en.wikipedia.org/wiki/World_of_Warcraft (last visited Oct. 31, 2007) [hereinafter Wikipedia, *World of Warcraft*].

whatever. For each mission accomplished the game developers reward players with greater skills, weapons, talents, game treasure, or other goodies. For example if you approach an NPC for a quest, you might be asked to kill an NPC monster who, once dead, yields up the rare and very useful Potion of Invisibility.⁵ In a structured game, NPCs play a significant role in guiding game play.⁶

Second, the range of virtual items that can be acquired is heavily controlled by the game developers who create the items and their characteristics. In WoW, as in most other structured games, one acquires virtual items in one of two ways. First, one picks them up either by finding them in a sort of treasure hunt, or by earning them after completing a quest. Second, one “makes” them by simply clicking the mouse button a few times in a pre-set order. Making an item involves a “recipe” where one’s character must gather the ingredients (or buy them from another player or NPC) and then assemble them. Thus, in WoW, once one finds all the necessary ingredients and clicks on all of them in the proper order, the virtual item—a sword, cloth, shield, magic potion, or other item—is made. Unlike real life, the process is always successful and produces the same result each time: a new virtual item. This is commonly called “crafting.”⁷ But the crafting does not create anything that has not been thought of and incorporated into the game by the designers. Crafted objects are first created by the game developers. While players may discover (and exploit) unintended interactions between various virtual objects, those interactions arise from the programming by the game developer and not from player programming.

Third, structured games typically involve “leveling.” The game developers assign skill points to characters based on the characters’ activities. The more you kill, the better you get at it in that the computer assigns you better odds of success in battle. Acquiring various items increases your chances of success at different tasks. A special sword might give you a 1% edge in battle; an even better sword with a spell on it might give you a 2% edge. Players also develop their professional skills—such as mining or smithing—by performing repetitive crafting tasks. Miners click and mine ore. Blacksmiths click and craft swords,

5. See Allakhazam.com: Invisibility Potion, <http://wow.allakhazam.com/db/item.html?witem=9172&locale=enUS;source=live> (last visited Oct. 31, 2007). I have tried to use examples of actual items used in WoW, although readers must understand that items present today may not, by the whim of game developers, be present tomorrow.

6. Examples of other well-known structured games are Everquest, Dark Age of Camelot, City of Heroes, Lineage, and Ultima Online.

7. Cory Ondrejka, *Escaping the Gilded Cage: User-Created Content and Building the Metaverse*, in *THE STATE OF PLAY: LAW, GAMES, AND VIRTUAL WORLDS* 158, (Jack Balkin & Beth Noveck eds., 2006). There are different levels of crafting as well. Some games may not allow a perfect result every time; other games may randomly assign special characteristics to your virtual item, over which you have no control.

once they have all the necessary ingredients. The more the miner mines, the greater the skill level the computer assigns to the character and the better quality product the character can produce. Likewise with blacksmiths. Crafting a set number of swords or armor increases the blacksmith's skill by a structured, pre-set, increment. Highly skilled blacksmiths craft really great swords that highly skilled warriors can use to increase their chances of success in quests and thereby increase their own skill levels.

As players gain skills their characters "level up" to more intricate and harder game play. In WoW, all players start out at Level 1 and can advance until their character achieves Level 70. They can then start another character or else play at that level with the friends they have made along the way. As players achieve higher levels of skill, the game developers make the quests more difficult and also give more powerful weapons, armor, spells, clothing, mounts, and other items to the characters. Game developers are constantly trying to create more game content—items, loot, quests, storylines—to keep the game interesting for both newcomers and hard-core gamers.

An important part of game play is the interaction between players, both cooperative and competitive. Quests embody the cooperative side. In WoW, players perform higher level quests in groups of up to twenty five characters. To facilitate questing, players generally band together in guilds. One or more players will "found" a guild and then recruit others to join. The others might be friends in real life or might be friends made in-world. Guilds often have up to thirty-five or forty members and larger guilds number in the hundreds. Players also "cooperate" in that the various supporting professions sell or trade items to enhance the powers and abilities of other characters. A priest might create excellent defensive spells which a warrior might find very useful to strengthen a weakness in defensive skills. It is this latter form of cooperative exchange that gives rise to the economics of gaming and potential tax issues.

On the competitive side, structured games build competition into their game play. Not only is there the indirect competition between players to go higher, faster, and further, but many structured games allow direct competition between players, generally in the form of player-to-player combat. In addition to those forms of competition, WoW is structured into two opposing factions, the Alliance and the Horde, who compete with each other for treasure, quests, all while being at constant war. Different NPCs in different parts of the virtual world are friendly to one side or the other. And players and guilds can do more than fight the NPCs; they can fight other players and other groups either singly (think duels) or in groups (think rumbles).

2. *Unstructured Games*

Second Life (SL) is an example of an unstructured role-playing game. Launched in 2003, it had approximately eight million “residents” as of July 17, 2007.⁸ Like WoW, players participate in SL through an online character, or avatar. While avatars are limited in their basic form (players can choose human or a variety of non-human forms), players have enormous ability to modify their avatar’s appearance.⁹ More importantly, SL avatars have few pre-set characteristics or skills and the skills they do have (such as flying) do not improve automatically with repetition. Nor do they have structured roles. There are no quests, no missions. There are few NPCs. The game developers do not attempt to define the game environment except by providing virtual landscapes and the means by which to create almost any virtual item imaginable through a basic computer script available to every player.¹⁰ It is like playing with LEGOs online.

The basic building blocks in SL are called “primitives” or “prims” and one can fashion almost any item imaginable from them. Players can and do build anything from real estate (homes, shops, discos, movie theaters, gardens, arenas), to personal items (clothing, body parts, furniture, pictures, vehicles, airplanes, fireworks, art), to recreation items (thunderstorms, pets, magic fountains, toys), to animation routines that make avatars do things like dance, skip, make faces, or simulate sex. Players who also want to fight can do that and can build weapons and shields from the prims. Players can use prims to make more overt or traditional expressive products, like movies, sculptures, magazines, or dance.

Player interaction is more crucial for SL gameplay than for WoW. While social interaction is important to structured games, it is vital to non-structured games. The whole point of the game is interaction: players spend their time interacting with other players. The interaction

8. See Second Life: Economic Statistics, http://www.secondlife.com/whatis/economy_stats.php (last visited Oct. 31, 2007) (providing updated information on in-world activity); see also Robert K. Elder, *1.4 Million Get a Virtual Life*, CHI. TRIB. WEB EDITION, Nov. 13, 2006, <http://www.chicagotribune.com/technology/chi-0611130210nov13.1.2778726.story?track=rss>; Reena Jana & Aili McConnon, *Second Life Lessons*, BUS. WK., Nov. 27, 2006, at 17. My description of SL comes from my own tours of the game world, the SL website description, Second Life: What is Second Life?, <http://secondlife.com/whatis/> (last visited Oct. 31, 2007); the Wikipedia article at Second Life—Wikipedia, The Free Encyclopedia, http://en.wikipedia.org/wiki/Second_Life (last visited Oct. 31, 2007); Roger Parloff’s description in *Anshe Chung: First Virtual Millionaire*, CNNMONEY.COM, Nov. 27, 2006, <http://legalpad.blogs.fortune.com/2006/11/27/anshe-chung-first-virtual-millionaire/> [hereinafter Parloff, *Anshe Chung*]; and Robert D. Hof, *My Virtual Life*, BUS. WK., May 1, 2006, at 72.

9. For one amusing rant, see Posting of Lisa Galarneau to Terra Nova, http://terranova.blogs.com/terra_nova/2006/08/my_other_self_i.html (Aug. 23, 2006) (observing limited clothing options in World of Warcraft for female avatars in contrast to Second Life).

10. Other well-known non-structured games are Sims Online and There. Doubtless others will have sprung into existence by the time this Article is printed and published in hardcopy.

can be social or economic, cooperative or competitive. Precisely because an estimated 99% of SL content is user-generated, the main activity for many players—or “residents” as they are often called—is to visit different parts of the SL world and play or trade in them.¹¹ Players engage each other cooperatively by, for example, going to a virtual school to learn how to script virtual objects, or building communities of shared values, or dancing or having virtual sex (commonly called tinysex). Players also engage competitively by, for example, trying to sell items in market competition, or trying to outdo others in social status competition, or by playing games or by fighting in player-versus-player combat in the areas so designated. In sum, players have fun trying on various personas, body parts, or clothes, seeing different sights, and meeting other people for chat, games, sex, fighting, or trade. As with structured games, it is this latter activity which creates the engine of the in-world economy and raises the taxation issues addressed by this Article.

B. INCOME-GENERATING ACTIVITIES

Unlike online poker or casino games, role-playing games initially seemed to have little connection with money. They were first conceived and played as escapist fantasy, online versions of Dungeons and Dragons.¹² But as the economist Edward Castronova discovered in his influential 2001 study of a single mid-sized online role-playing game called Everquest, virtual economies are an integral part of game play as game developers create conditions of scarcity.¹³ Further, in-game economies have readily ascertainable real world value to players. Castronova estimated that the gross national product of Everquest was \$135 million, or \$2,226 per capita. He further estimated that “an hour in [Everquest] produces utility worth \$14.15” to the average player, and that the average avatar “wage” (as measured by “regressing the total value of an avatar’s equipment and cash by the number of hours that avatar had been active”) was \$3.42 per hour.¹⁴ Since then, stories abound of players turning their game play into real income, and of players who have amassed virtual assets worth over a million U.S. dollars.¹⁵ In 2006,

11. Ondrejka, *supra* note 7, at 163 (stating that “well over 99 percent of the objects in Second Life are user created”).

12. Lastowka & Hunter, *supra* note 3, at 14–29.

13. Edward Castronova, *Virtual Worlds: A First-Hand Account of Market and Society on the Cyberian Frontier* 16–17 (Ctr. for Econ. Studies & Ifo Inst. for Econ. Research, Working Paper No. 618, 2001), available at <http://ssrn.com/abstract=294828> (“And, somewhat shockingly, scarcity is what makes the [Virtual World] so fun. . . . In a post-industrial society, it is social status, more than anything else, that drives people to work so diligently all their lives. In this respect, [Virtual Worlds] are truly a simulacrum of Earth society.”). At that time Everquest had a medium-sized base of 240,000 players.

14. *Id.* at 35.

15. See, e.g., Julian Dibbell, *The 79th Richest Nation on Earth Doesn’t Exist*, WIREd, Jan. 2003, at 106; Hof, *supra* note 8, at 72; Laurence H. M. Holland & David M. Ewalt, *Making Real Money in*

writer Julian Dibbell recounted his experiences in buying and selling “virtual loot” for real U.S. dollars, including his humorous attempt to seek tax advice from the IRS.¹⁶

The heart of economic activity in both structured and non-structured games is trade. Both structured and unstructured MMORPGs facilitate game play through the use of on-line mediums of exchange. In WoW, the top unit of in-world currency is called Gold and is broken down into subunits called Silver and Copper. One Gold piece is equal to one hundred Silver pieces or ten thousand Copper pieces. In SL, the sole unit of currency is called the Linden Dollar (reflecting the name of the company that owns SL, Linden Lab). I will use the symbol G\$ to represent WoW currency and the symbol L\$ to represent SL currency and the symbol US\$ to represent U.S. dollars. Players with a paid subscription to SL receive periodic “allowances” of virtual currency.¹⁷

Players create wealth through two types of activity: in-world and real-world. First, players create wealth by trades conducted wholly within the game environment. In-world transactions (IWT) might take the form of swapping virtual items for other virtual items, or swapping virtual items for in-world currency, or swapping in-world services for in-world currency. Second, players engage in what is typically called real money trading (RMT) whereby they sell either individual virtual items or entire player accounts for real-world currency on sites like eBay or other third party vending sites. I shall discuss each type of activity in turn.

1. In-World Transactions (IWT)

In-world transactions (IWT) are an important part of both structured and unstructured games. In structured games such as WoW, all characters need virtual items such as swords, potions, guns, and spells in order to play and advance levels. These virtual items are crafted by those characters in the production professions such as blacksmiths, alchemists, engineers, and mages. To make these items requires a recipe and ingredients. NPCs provide recipes (more complex ones to higher level professionals) and the gathering professions provide the ingredients. The game environment thus creates a market between those

Virtual Worlds, FORBES.COM, Aug. 7, 2006, http://www.forbes.com/careers/2006/08/07/virtual-world-jobs_cx_de_0807virtualjobs.html; Parloff, *Anshe Chung*, *supra* note 8; Roger Parloff, *From Megs to Riches*, FORTUNE, Nov. 28, 2005, at 184; Mark Wallace, *The Game is Virtual, The Profit is Real*, N.Y. TIMES, May 29, 2005, § 3, at 7.

16. JULIAN DIBBELL, *PLAY MONEY: OR HOW I QUIT MY DAY JOB AND MADE MILLIONS TRADING VIRTUAL LOOT* 302–13 (2006).

17. How game developers control (or don't control) the volume of in-world currency is beyond the scope of this Article, but developers have an array of mechanisms to prevent either intolerable inflation or deflation. For one readable discussion, see Grace Wong, *How Real Money Works in Second Life*, CNNMONEY.COM, Dec. 8, 2006, http://money.cnn.com/2006/12/08/technology/sl_index/index.htm.

who gather and those who produce.

For example, if one is a blacksmith and needs a series of ingredients to make a special sword, one might acquire some of the ingredients oneself if one is also a gatherer, such as a miner. But the recipes are structured to encourage trade between players. Further, “some players choose to select only ‘gathering’ professions, opting to supply resources to players with item creation skills. These players will typically offer gathered items for sale in the game’s auction houses.”¹⁸

Here is an example taken from the WoW website:

A Human Warrior seeking to quest in the more dangerous parts of Azeroth has commissioned you to forge a powerful weapon for his use. As one of the most celebrated Human weaponsmiths in Stormwind, you are used to this sort of request. What is unusual, though, are the four pieces of jade (a useful and rare material) the Warrior is willing to trade for your work. And so you set yourself to the forge and begin the process of creating a deadly frost tiger blade. Checking your recipe, you find that the following ingredients are needed to forge the weapon:

- 8 Steel Bars
- 2 Strong Flux
- 1 Frost Oil
- 2 Jade
- 2 Heavy Grinding Stones
- 4 Heavy Leather

As a weaponsmith, you maintain a stock of iron ore and grinding stones (needed to polish and sharpen the weapon to a fine razor’s edge). You take a quick trip to the forge to smelt the iron ore and coal into steel bars. A nearby merchant sells the strong flux that removes impurities from the steel. To fill out the ingredients list, you make your way to an alchemist, but unfortunately you learn that he requires the herb wintersbite to make frost oil for you. So, to acquire the wintersbite herb, you trade a stack of sharpening stones to your friend, who happens to be an herbalist, and then you give the wintersbite to the alchemist, who then concocts the arcane frost oil for you.

Now the ingredients are complete, and you forge the weapon, confident that there will be no failure and that the frost tiger blade will be born from the rare ingredients used to create it. Thrilled with your work, the Human Warrior leaves the remaining jade with you in payment.¹⁹

Backing up the player-to-player trade regime are the WoW NPC traders. While NPC traders buy low and sell high, they are programmed to always buy and sell, and always for a preset price. This forms the outer

¹⁸ Wikipedia, *World of Warcraft*, *supra* note 4.

¹⁹ See *World of Warcraft*, Introduction to Professions, <http://www.worldofwarcraft.com/info/professions/intro.html> (last visited Oct. 31, 2007).

bounds of the player-to-player trading and also forms opportunities for arbitrage based on asymmetrical information flow.²⁰ Thus, in the above example, if you were not able to find an herbalist player who had wintersbite, and if you could not find one to pay to gather it, you would have to find an NPC who had it and pay gold or silver or copper for it. Since wintersbite is a moderately rare herb, found only in one region, it may only be available from a few NPC merchants—requiring travel and adventure to find it—or indeed it may not be available from any NPC and, if so, finding it or buying it from another player would be the only way to acquire it. In this way, IWT is essential to game play. It is the scarcity of items required to advance in the game that keeps the game interesting and enjoyable. And it is the scarcity that creates a market.

IWT plays an even more important role in unstructured games. It is not going too far to describe Second Life as one article did: an online capitalist fantasy game.²¹ For games like SL to attract and retain players, player-to-player transactions are essential. The open-ended scripting language made available to all players by the game creators allows any player to create any object imaginable. Those players who have the time, talent, and inclination can use SL's powerful scripting language to create virtual objects that are fun to see or use. Since production costs are negligible, players can sell copies of their work to other gamers who are willing to substitute L\$ for time and talent. Other gamers sell services. It is not surprising to find the world's oldest profession flourishing in SL.²²

In SL, virtual land can be "owned" within the game context by players. SL sells land in blocks starting at 512 virtual square meters. As implied by the designated size, the creation of each increment of virtual land—and representation of what can now occur "on" that virtual land—requires some corresponding increment of processing power and so landowners not only pay a subscriber fee, they also pay a "property tax" (called a "land use fee"). Some players act as virtual real estate developers, buying land and then, after making landscaping or other improvements, subdividing it, and re-selling or renting it out.²³ Although

20. See Bryn Davies, *Sustainable Economics, Price Arbitrage, Information Assymetry and Elastic & Inelastic Markets in a World of Warcraft Economy*, <http://www.progsoc.org/~curious/economics.html> (last visited Oct. 31, 2007).

21. Rachel Konrad, *IBM to Open Islands in Virtual World*, USATODAY.COM, Dec. 13, 2006, http://www.usatoday.com/tech/news/2006-12-13-ibm-second-life_x.html ("Second Life is a subscription-based 3-D fantasy world devoted to capitalism—a 21st century version of Monopoly that generates real money for successful players.").

22. See, e.g., Shawn Elliot, *Escort Mission: Massively Multiplayer Online Games Get a New Character Class: Call Girls*, PCMAG.COM, May 16 2006, <http://www.pcmag.com/article2/0,2704,1964618,00.asp>.

23. That is how the wealthiest avatar in SL, Anshe Chung, makes her virtual money. See Robert D. Hof, *Second Life's First Millionaire*, BUSINESSWEEK.COM, Nov. 26, 2006, http://www.businessweek.com/the_thread/techbeat/archives/2006/11/second_lifes_fi.html ("[Anshe Chung] achieved her fortune by beginning with small scale purchases of virtual real estate which she

“owned” within the game context, it is not clear whether real world property rights attach to virtual land. It is also not clear what real world property rights, if any, attach to virtual items in SL. That is the subject both of a lawsuit in Pennsylvania and Part III of this Article.²⁴

2. *Real Money Trades (RMT)*

Virtual transactions have real economic value because of RMT. Although SL game developers give periodic “allowances” of in-world currency to paid subscribers, it is not nearly enough if one wants to play much. And if your WoW avatar does not complete quests or trade, it will never acquire the gold necessary to level up. Thus, if one’s friends are playing WoW with Level 41 characters (who are entitled to upgraded modes of transportation), one cannot keep up very well with a Level 1 character. So one might want to buy a ready-made Level 41 character rather than take the considerable game-time to level up a new character to match the others. Or one might purchase a program that will make your character perform the basic repetitive tasks that increase skill points.²⁵ Similarly, if one needs a particular virtual item, such as a special herb or sword, one might find it cheaper to buy it with real U.S. dollars on an RMT exchange site than to find the time to harvest the necessary gold.

The RMT market for virtual items is robust. The president of one third-party auction site estimated that over \$880 million dollars had passed through that site during its 2004 operating year.²⁶ The purchase of

then subdivided and developed with landscaping and themed architectural builds for rental and resale. Her operations have since grown to include the development and sale of properties for large scale real world corporations, and have led to a real life “spin off” corporation called Anshe Chung Studios, which develops immersive 3D environments for applications ranging from education to business conferencing and product prototyping.” (quoting Press Release, Anshe Chung Studios, Anshe Chung Becomes First Virtual World Millionaire (Nov. 26, 2006), http://www.anshechung.com/include/press/press_release251106.html)).

24. *Bragg v. Linden Research, Inc.*, 487 F. Supp. 2d 593, 595 (E.D. Pa. 2007) (denying motion to dismiss for lack of jurisdiction and motion to compel arbitration); see also Kathleen Craig, *Second Life Land Deal Goes Sour*, WIRED NEWS, May 18, 2006, <http://www.wired.com/gaming/virtualworlds/news/2006/05/70909>. The suit is blogged regularly at the Terra Nova blog. See Posting of Dan Hunter to Terra Nova, http://terranova.blogs.com/terra_nova/2007/05/bragg_and_ige_c.html (Oct. 30, 2006). The *Bragg* case settled outside of court and so has passed this first opportunity for a judicial opinion on the legal status of virtual property. See Posting of Greg L to Terra Nova, http://terranova.blogs.com/terra_nova/2007/10/virtual-law-upd.html#more (Oct. 16, 2007).

25. For example, one program available for sale on eBay, called Airbot, is a robot program described as “a tool that plays your World of Warcraft character for you. It allows you to be away from the keyboard, while your character hunts the monsters you want, gathers gold, items, and high amounts of experience.” See WorldofBot.com, <http://www.worldofbot.com> (last visited Oct. 31, 2007).

26. This estimate was made by the President of IGE at the second State of Play conference sponsored by New York Law School in December 2004. See Posting of Edward Castranova to Terra Nova, http://terranova.blogs.com/terra_nova/2004/10/secondary_marke.html (Oct. 30, 2004). The statement was quickly picked up by mainstream media. See Amy Kolz, *Real Virtuality—The Worlds in Online Games Are Imaginary—But the Property Isn’t*, THE AM. LAW., Dec. 6, 2004, at 38; Wallace, *supra* note 15. One of the larger third party auction sites, covering most structured MMORGS, is

virtual items through a third-party auction site is almost always a two-step process because the deal almost always has to be closed within the game environment. That is, the buyer essentially buys the seller's agreement to meet the buyer's character in-world and give the purchased item. From the perspective of the game, the item is transferred for no charge.

Perhaps the most common virtual item to purchase is in-world currency. Both the G\$ and the L\$ are highly liquid; players can easily purchase, or sell, in-game currency for US\$. The SL site has opened up its own exchange, and earns about 10% of its total revenue from brokering trades.²⁷ Over the past year the exchange rate has fluctuated between L\$250–290 per US\$.²⁸ The price of WoW Gold depends in part on what server one wishes to play on and, at the time this Article was written, sold for a surprisingly disparate range of G\$4–10 per US\$.²⁹

The high demand for G\$ and L\$ has spawned an entire third-world industry—mostly in China—where labor is cheap. There, people are paid to “farm” gold by playing the game and selling the virtual items thus acquired to the NPC vendors who, while always paying the lowest price, always pay. The G\$ thus harvested is then resold on auction sites to players who value their time at the price asked.³⁰ The prices of virtual items range from a few dollars to a few hundred dollars. One exuberant player spent \$100,000 buying a virtual space station in an online game called Entropia.³¹

In addition to virtual item and currency sales, players of structured games regularly sell their player accounts. A player's game account might contain multiple characters.³² In a structured game like WoW, the

Allakhazam's Magical Realm. See Allakhazam.com, <http://allakhazam.com> (last visited Oct. 31, 2007).

27. Wong, *supra* note 17.

28. For current rates, see SL Exchange Market Summary, <http://www.slexchange.com/modules.php?name=Currency> (last visited Oct. 31, 2007).

29. The price disparities can be huge. See, e.g., ThSale.com, Buy WoW Gold, http://www.thsale.com/Cheap.013.013.002.008.World_of_Warcraft_-_US.Argent_Dawn_US-Horde.aspx (last visited Oct. 31, 2007) (selling G\$100 for use by Horde characters on Argent Dawn server for US\$23.85); WoWMine.com, Buy WoW Gold, <https://www.wowmine.com/buy-cheap-wholesale-wow-gold.php?serverarea=5> (last visited Oct. 31, 2007) (selling same for US\$9.75); IGE.com, Buy WoW Gold, http://www.ige.com/wowus/gold/argentdawnus/horde/worldofwarcraftus_en.html (last visited Oct. 31, 2007) (selling same for US\$26.35). Average prices at some third-party sites are tracked at GameUSD.com. See Wow Gold Prices, <http://www.gameusd.com/wow-gold.htm> (last visited Oct. 31, 2007). Price disparities may be partly due to the age and popularity of the server.

30. For a description of the gold farming operations, see Dibbell, *supra* note 1, and Tim Johnson, ‘Gold Farming’ in Games Means Real Income in China, SAN JOSE MERCURY NEWS, July 18, 2006, available at LEXIS. The phenomenon has formed the theme of at least one work of short fiction. See Cory Doctorow, *Anda's Game*, SALON.COM, Nov. 15, 2004, http://dir.salon.com/story/tech/feature/2004/11/15/andas_game/index.html.

31. Peter Svensson, *Man Pays \$100,000 for Virtual Space Station*, SPACE.COM, Nov. 10, 2005, http://www.space.com/entertainment/ap_051110-virtual_spacestation_ent.html.

32. See Castronova, *supra* note 13 (noting that in his study of the MMORPG “Everquest,”

accounts are readily valued by the level of the characters being sold and the nature of items owned by the characters within the game context. In contrast, sales of player accounts for unstructured games are quite rare, even though they can also be well valued. The most prominent example was the valuation of Anshe Chung's account in SL.³³

II. BASIC TAX PRINCIPLES³⁴

Taxation shadows economic activity. To harvest the fiscal resources necessary to nurture the best of all possible worlds, the tendrils of taxation must take nourishment from those whose economic gardens prosper.³⁵ Historically, successful governments have based taxation on three indicia of economic success: wealth, consumption, and income.³⁶ For reasons beyond this Article's scope, the United States government uses income as the tax base of choice.³⁷ Taxes on income currently

players used an average of 2.72 avatars).

33. Daniel Terdiman, *Virtual Magnate Shares Secrets of Success*, CNET NEWS.COM, Dec. 20, 2006, http://news.com/2008-1043_3-6144967.html (reporting owner's claim that the value of Anshe Chung Studios was "independently assessed . . . by . . . investment firms" at over \$1 million).

34. I limit this Article's doctrinal analysis to individual taxpayers. Further, because this is an article and not a book, I limit discussion to the issue of whether IWT gives rise to gross income within the meaning of I.R.C. § 61 (2000). Thus I will not consider what exclusions or deductions might be available to taxpayers, either those acting with the requisite continuity and regularity to constitute a trade or business under *Commissioner v. Groetzinger*, 480 U.S. 23, 35 (1987), or those engaging in the activity as a hobby and thus subject to the rules in I.R.C. § 183. Although those are interesting issues, they do not come into play unless and until the activity in question produces gross income within the meaning of I.R.C. § 61. Nor will I consider issues of timing or characterization. Finally, please note that this discussion applies only to those subject to U.S. income tax laws and so the primary taxpayer population I discuss are U.S. citizens, who are taxed on worldwide income. To the extent that game servers are physically located in the United States (for example, SL servers are all in California), then the extent to which international taxation rules might subject all players to the U.S. income tax laws is beyond the scope of this Article. For a good discussion of problems created by applying sourcing rules to server transactions, see Arthur J. Cockfield, *Transforming the Internet into a Taxable Forum: A Case Study in E-Commerce Transactions*, 85 MINN. L. REV. 1171 (2001).

35. Although not without critics, this view is a longstanding one among those interested in the subject of taxation. See EDWIN R. A. SELIGMAN, *THE INCOME TAX: HISTORY, THEORY, AND PRACTICE OF INCOME TAXATION* 4 (2d ed. 1914) ("This history of finance, in other words, shows the evolution of the principle of faculty or ability to pay—the principle that each individual should be held to help the state in proportion to his ability to help himself."). One recent, attention-worthy article critiques academicians for having abandoned this principle in tax theory scholarship and points out the resulting gap between the academic and political justifications for an income tax. Theodore P. Seto & Sande L. Buhai, *Tax and Disability: Ability to Pay and the Taxation of Difference*, 154 U. PA. L. REV. 1053, 1083–86 (2006) (noting the vitality of the "ability to pay" principle in political discourse but not in academic discourse).

36. See generally Noël Cunningham, *The Taxation of Capital Income and the Choice of Tax Base*, 52 TAX L. REV. 17 (1996) (discussing choice of base). State and local governments have traditionally relied on consumption and wealth as tax bases, the usual examples being state sales taxes (consumption) and local property taxes (wealth).

37. For a description of the early ascendancy of the income tax, see SELIGMAN, *supra* note 35, at 367–87. For a classic defense of using income as the tax base, see Richard Musgrave, *In Defense of an Income Concept*, 81 HARV. L. REV. 44, 45–46 (1967).

account for almost 80% of federal revenues.³⁸

The foundational legal concept of the Internal Revenue Code is “gross income” as defined in § 61.³⁹ Section 1 imposes tax on “taxable income.” Section 63 defines that term as “gross income minus the deductions allowed by this chapter.” And § 61 defines “gross income” as “all income from whatever source derived.” The regulations emphasize that taxpayers have gross income when they receive *anything* of economic value, whether in the form of cash, property, or services.⁴⁰ The Supreme Court has long interpreted the language in § 61 to extend as far as constitutionally possible.⁴¹ In its talismanic phrase, “income” means any “undeniable accessions to wealth, clearly realized, and over which the taxpayer[has] complete dominion.”⁴² The form of the wealth does not matter. The source of the wealth does not matter. The accession to it does.

When taxpayers sell property, not all of the income received is gross income within the meaning of § 61. That is, the taxpayer’s wealth is not increased by all of what is received for the property because the property generally has cost the taxpayer something in the first place. Section 1001 provides a formula: taxpayers subtract their “basis” in the property from the “amount realized” from the disposition. Section 1001(b) defines “amount realized” as the sum of (a) all cash received plus (b) the fair market value of any property received. The term “basis” is not defined so much by statute as by case law.⁴³ Basis is a complex topic but at its

38. In FY2005, the tax paid on the incomes of both individual and corporate taxpayers accounted for 79.3% of all gross collections. See INTERNAL REVENUE SERV., DEP’T OF THE TREASURY, INTERNAL REVENUE SERVICE DATA BOOK 2005, at 1 tbl.1 (2005). 13.5% of gross collections came from corporate income taxes, 48.8% came from individual income taxes, and 34.0% came from employment taxes. *Id.* Since half of the employment tax is borne by workers and is a function of their wage income, I count that 17.0% as an income tax. See *id.* In contrast, the employer portion of the tax is a tax on consumption of labor, as measured by dollars spent. So viewed, consumption taxes—on the use of labor as well as such diverse items as alcohol, fuel, and telephone calls—accounted for about 19.5% of gross collections in FY2005. *Id.* Even smaller is the federal tax on wealth—the estate and gift tax regime—which made up only 1.1% of the gross collections in FY2005. *Id.* For those who notice, given that FY2005 gross collections amounted to over \$2 billion, the missing 0.1% is a heck of a rounding error. See Bryan T. Camp, *The Mysteries of Erroneous Refunds*, 114 TAX NOTES 231 (2007). Even taking the 79.3% figure as accurate does not show that income is truly the base. As others have noted, the federal tax system has some features of a consumption tax when one considers the increasing number of provisions, such as the Roth IRA, see I.R.C. § 408A (2000), or education savings accounts, see I.R.C. § 529, that either defer tax on earnings in certain savings accounts until they are spent, or else outright exclude such earnings from tax.

39. Unless otherwise noted, all references in text or notes to code sections refer to the Internal Revenue Code, beginning at 28 U.S.C. § 1 (2000).

40. Treas. Reg. § 1.61-1 (2007) (“Gross income includes income realized in any form, whether in money, property or services. Income may be realized, therefore, in the form of services, meals, accommodations, stock, or other property, as well as in cash.”).

41. *Eisner v. Macomber*, 252 U.S. 189, 203 (1920).

42. *Comm’r v. Glenshaw Glass Co.*, 348 U.S. 426, 431 (1955).

43. See, e.g., *Phila. Park Amusement Co. v. United States*, 126 F. Supp. 184, 188 (Ct. Cl. 1954).

core refers to the way in which the tax system tracks what part of the value of a piece of property will not constitute gross income. It generally refers to the amount of previously taxed dollars invested in the property that should not be taxed again. As a simple example, suppose I spend \$850 to buy ten shares of Google stock at \$85 per share (I disregard transaction costs in this and all examples in this Article). When I sell the stock, my wealth has increased only to the extent I get more than \$850 out of the sale. The concept of basis in § 1001 protects that \$850 by excluding it from the reach of “gross income.”⁴⁴

To determine the extent to which the concept of gross income will reach in-world transactions, it is important to first examine its historic limits. To the extent that in-world transactions involve dispositions of property, then the concepts contained in § 1001, including basis, will also come into play. Subsection A of this Article will discuss the constitutional limits on the reach of § 61 and Subsection B will look at the operational limits.

A. CONSTITUTIONAL LIMITS ON THE LEGAL CONCEPT OF INCOME

The Constitution imposes no restrictions on *what* Congress can tax.⁴⁵ Article I, Section 8, Clause 3 says plainly: “The Congress shall have the power to lay and collect Taxes, Imposts, Duties, and Excises.” The Constitution does impose limits on *how* Congress may tax. For example, Congress cannot exercise its taxing powers in violation of other constitutional requirements, such as equal protection.⁴⁶ Historically, the

44. Likewise, if I buy a car for \$25,000, my basis is \$25,000. See I.R.C. § 1012. Even if I win a car worth \$25,000 in a lottery, then my basis is also \$25,000. See *Strong v. Comm’r*, 91 T.C. 627, 640 (1988). This is because I have to report and pay tax on the receipt of the car. I am treated as if I had received a \$25,000 cash prize and then immediately used the money to buy the car. In both cases, if I dispose of the car and receive more than \$25,000 worth of cash, property or services for it, then I report and pay tax only on the amount greater than my basis of \$25,000. If I get less than \$25,000 for the car, however, I cannot deduct the loss unless the car is sufficiently connected to a trade or business activity. See I.R.C. § 165.

45. For a delightfully tax-centric view of the formation of that document, see CALVIN JOHNSON, *RIGHTEOUS ANGER AT THE WICKED STATES: THE MEANING OF THE FOUNDERS’ CONSTITUTION* 2 (2005) (arguing that “[t]he Constitution was first a pro-tax document, written to give the federal government revenue to pay enough of the war debts to restore the public credit so that the federal government could borrow again in the next emergency”). But see Erik M. Jensen, *The Taxing Power, the Sixteenth Amendment and the Meaning of “Incomes,”* 33 ARIZ. ST. L.J. 1057, 1059 (2001) (“[T]his Article continues my challenge to the notion that the taxing power is . . . without significant restrictions . . . and challenges the generally held notion that the [Sixteenth] Amendment supports an unlimited taxing power.”).

46. See, e.g., *United States v. Reorganized CF&I Fabricators of Utah, Inc.*, 518 U.S. 213, 226 (1996) (10% “tax” on unfunded pension plans was really a disguised non-pecuniary loss penalty and so was not entitled to be paid out in bankruptcy at the same priority as a tax); *Moritz v. Comm’r*, 469 F.2d 466, 470 (10th Cir. 1972) (finding dependent care deduction invalid for discriminating between unmarried male and unmarried female taxpayers), *cert. denied*, *Comm’r v. Moritz*, 412 U.S. 906 (1973); see also Bryan T. Camp, *The Equal Protection Problem in Innocent Spouse Procedures*, 112 TAX NOTES 281, 288–90 (2006).

most substantive restriction on *how* Congress could tax has been Article I, Section 9, Clause 4, which says that any “capitation, or other direct, Tax” must be made “in proportion to the Census or Enumeration herein before directed to be taken.”⁴⁷ This is known as the apportionment rule. While this clause does not, in theory, forbid imposition of a “direct tax” (whatever that might be), it has historically doomed such a tax as a political matter. The Supreme Court has only twice held a tax to be subject to the apportionment rule, in 1895 and in 1921.⁴⁸ Neither case survives today in a form that limits the legal reach of “gross income.” Nonetheless, one needs to understand why these cases now reside in history’s dustbin to understand why transactions occurring wholly within a virtual world may have real life tax consequences.

The first case was *Pollock v. Farmers’ Loan & Trust Co.*, where the Court held that a tax on income from rental property was a direct tax subject to apportionment.⁴⁹ That decision threw into doubt the ability of Congress to tax *any* income without apportionment and its political consequence was to halt application of an income tax on individuals.⁵⁰ Only the passage of the Sixteenth Amendment in 1913 resolved those apportionment doubts by authorizing taxation of “incomes, from whatever source derived, without apportionment among the several States.”⁵¹ As a result, if it is “income” then Congress can tax it without apportionment.

The second time the Supreme Court imposed a constitutional limit was in its Ozymandian 1921 decision, *Eisner v. Macomber*. No traveler in tax law can avoid considering this monument to formalism, where the Court concluded that mere accretion of wealth was not “income” within the meaning of the Sixteenth Amendment and, hence, could not be “income” within the meaning of the language now in § 61.⁵² There, Mrs.

47. U.S. CONST. art. 1, § 9, cl. 4; see also U.S. CONST. art. 1, § 2, cl. 3.

48. See *Eisner v. Macomber*, 252 U.S. 189, 219 (1920); *Pollock v. Farmers’ Loan & Trust Co.* 157 U.S. 429, 607 (1895).

49. *Pollock*, 157 U.S. at 607 (1895).

50. SELIGMAN, *supra* note 35, at 586–92. In 1912, even before the Sixteenth Amendment was ratified by the states, the House of Representatives passed House Bill 21214, which imposed an “excise” tax on net incomes. See H.R. 21214, 62d Cong. (1912). The measure was rejected by the Senate in May 1912, but the ratification of the Sixteenth Amendment on February 25, 1913, mooted the issue by allowing Congress to tax incomes directly. See H.R. REP. NO. 62-416, at 1–10 (1912). See generally 93 INTERNAL REVENUE ACTS OF THE UNITED STATES, 1909–1950: THE LAWS, LEGISLATIVE HISTORIES, AND ADMINISTRATIVE DOCUMENTS (Bernard D. Reams, Jr., ed. 1979) (reprinting legislative documents on H.R. 21214).

51. U.S. CONST. amend. XVI. The Supreme Court repeatedly held the constitutional amendment did not extend the taxing power to new subjects, but merely removed the necessity which otherwise might exist for an apportionment among the States of taxes laid on income. See *Peck & Co. v. Lowe*, 247 U.S. 165, 172–73 (1918); *Stanton v. Baltic Mining Co.*, 240 U.S. 103, 112 (1916); *Brushaber v. Union Pac. R.R.*, 240 U.S. 1, 17–19 (1916).

52. *Eisner*, 252 U.S. at 219. The practical result of the case was to deny Congress the ability to tax the amount in question because there was no practical way for Congress to ensure the tax was imposed

Eisner had received a corporate dividend in the form of additional corporate stock.⁵³ The Court held that it was merely an increase in her capital and not income.⁵⁴ Thus, to tax the stock dividend was to tax capital and not income. While Congress could indeed tax it, such a tax would have to be apportioned and did not come under the Sixteenth Amendment apportionment exception because what was being taxed was not "income."⁵⁵

The *Eisner* majority identified two constitutional limitations to the legal reach of "income." The first was about source. The Court opined that income arose from either of two sources, capital or labor, calling that the understanding "used in common speech."⁵⁶ This formulation implied that increases in wealth not linked to capital or labor or to a concept of income "used in common speech" could not be income within the scope of the Sixteenth Amendment. The second limitation, commonly called the realization requirement, was the real meat of the opinion. An increase in wealth in the form of additional capital did not become "income" unless and until it was severed from the capital.⁵⁷ Until then it was just appreciation, a "paper" gain. Thus, while a cash dividend was income, a true stock dividend was not because it left the taxpayer with no new assets and no change in position with respect to the other owners of the corporation. While the taxpayer had an increase in wealth, she did not realize any income from it until she cashed out.⁵⁸

Both of the constitutional barriers to the reach of "gross income" erected by *Eisner* (either impliedly or explicitly) have been systematically dismantled. Later Supreme Court decisions replaced a formalist notion of income with a more functional concept. The idea that the source of the economic gain mattered was taken down in 1955 in *Commissioner v. Glenshaw Glass Co.*⁵⁹ The taxpayer there had been a

in proportion to the population of each state.

53. *Id.* at 200-01.

54. *Id.*

55. *Id.*

56. *Id.* at 207 ("After examining dictionaries in common use . . . we find little to add to the succinct definition adopted in two cases arising under the Corporation Tax Act of 1909—'Income may be defined as the gain derived from capital, from labor, or from both combined.'"(citations omitted)).

57. *Id.* ("Here we have the essential matter: *not* a gain *accruing to* capital, not a *growth or increment* of value *in the investment*; but a gain, a profit, something of exchangeable value *proceeding from the property, severed from the capital* however invested or employed, and *coming in*, being '*derived*,' that is, *received or drawn* by the recipient (the taxpayer) for his *separate* use, benefit and disposal—that is income derived from property. Nothing else answers the description.").

58. *Id.* at 211 ("A 'stock dividend' shows that the company's accumulated profits have been capitalized, instead of distributed to the stockholders or retained as surplus available for distribution in money or in kind should opportunity offer. Far from being a realization of profits of the stockholder, it tends rather to postpone such realization, in that the fund represented by the new stock has been transferred from surplus to capital, and no longer is available for actual distribution.").

59. 348 U.S. 426 (1955).

plaintiff in a prior lawsuit who did not report as income some \$325,000 in punitive damages it had received.⁶⁰ The Third Circuit, relying on the “common usage” limitation implied by *Eisner*, accepted the taxpayer’s argument that a punitive damage award was not income because, being a windfall, it did not derive from either capital or labor and ordinary folks would not consider it to be income.⁶¹ Refusing to be drawn in to a metaphysical argument about when and how income “derived” from capital or labor, the Supreme Court declared that the *Eisner* definition of “income” was not to be taken as the “touchstone” of all income questions.⁶² The Court insisted that § 61 contains “no limitations as to the source of taxable receipts, nor restrictive labels as to their nature.”⁶³ Instead of relying on a formalist inquiry as to source, the Court inscribed into tax law and lore a functional definition of income: since the receipt of \$325,000 was an instance of “undeniable accession[] to wealth, clearly realized, and over which the taxpayers have complete dominion,” it was gross income.⁶⁴ In so doing, the Court appeared to have aligned the legal concept of income with an economic concept.

Nor has the second *Eisner* limitation retained its constitutional dimension. The idea that income could not include accrued economic value was hit hard in 1940 by the Supreme Court in *Helvering v. Bruun*.⁶⁵ There, the taxpayer leased some land on which the tenant built a building.⁶⁶ When the tenant defaulted on the lease, the taxpayer got back the property which now had a valuable building sitting on it.⁶⁷ Relying on *Eisner*, the taxpayer argued that since the termination of the lease did not (and indeed could not) formally sever the building from the land, all that had happened was that the underlying property had appreciated in value.⁶⁸ What the taxpayer had gotten back was just like a true stock dividend. The Court rejected that view and found that the appreciation in the property due to the building was indeed “income” within the

60. *Id.* at 428.

61. *Comm’r v. Glenshaw Glass Co.*, 211 F.2d 928, 933 (3d Cir. 1953). In effect, the Third Circuit punted the entire issue noting that “[t]he Supreme Court has never expressly departed from the definition of income of *Eisner v. Macomber*” and that, in fact, “[t]here is as yet no decision which has adopted the contentions made by the Government here.” *Id.* So, no matter how attractive the government’s position might be, the court concluded that “if such a result is to be achieved after nearly two decades it should be effected by the Supreme Court and not by this tribunal.” *Id.* at 933–34.

62. *Id.* at 429.

63. *Id.*

64. *Id.* at 431. The Court’s holding reflected the intent of the taxwriters who revised the 1939 Tax Code into the 1954 Tax Code. The House Ways and Means Committee Report noted: “Section 61 (a) provides that gross income includes ‘all income from whatever source derived.’ This definition is based upon the 16th Amendment and the word ‘income’ is used in its constitutional sense.” H. R. REP. NO. 82-1337, at 18 (1952).

65. *Helvering v. Bruun*, 309 U.S. 461 (1940).

66. *Id.* at 464.

67. *Id.*

68. *Id.* at 468.

meaning of the statute.⁶⁹ The Court said the taxpayer had to report the value of the building as income in the year the lease terminated and that the government did not need to wait until the taxpayer took some action to convert the appreciation into cash.⁷⁰ To avoid the harsh result (harsh because it took no account of cash flow), Congress statutorily overruled *Bruun* by writing a cash-out rule into the Code. Section 109 now provides that “gross income does not include income (other than rent) derived by a lessor of real property on the termination of a lease.” Section 1019 drops the other shoe: the amount excluded by § 109 cannot figure into basis and so will eventually be included in income when the lessor cashes out by selling or exchanging the property.

The realization requirement imposed by *Eisner* was permanently demoted from a constitutional to an administrative requirement in the Supreme Court’s 1991 decision of *Cottage Savings Ass’n v. Commissioner*.⁷¹ There the taxpayer bank had swapped a portfolio of mortgage loans with another bank’s portfolio of loans.⁷² The taxpayer had a basis of \$6.9 million in the portfolio but because interest rates had risen dramatically, the stream of income generated by that \$6.9 million could now be generated by a mere \$4.5 million.⁷³ Accordingly, the face value of the taxpayer’s portfolio had dropped. The taxpayer figured that if it swapped its portfolio with another, more recent, set of loans that was also worth \$4.5 million, it could take a \$2.4 million loss and still be in the same economic position as it was before relative to risk of default.⁷⁴ So in an attempt to cash out the loss it did the swap. The IRS did not think the swap of portfolios was a realization event sufficient to trigger the § 1001 calculations because there was no change in economic position by the bank. It really had not cashed out of anything as evidenced by its strict compliance with the Federal Home Loan Bank Board’s Memorandum R-49 which approved such deals only when the mortgage loan portfolios were “substantially identical” such that there was no transfer of risk.⁷⁵ The Supreme Court, however, rejected the government’s argument, holding that the realization rule was a tax administration rule.⁷⁶ So

69. *Id.* at 468–69.

70. *Id.* at 467–68.

71. *Cottage Sav. Ass’n v. Comm’r*, 499 U.S. 554, 565 (1991).

72. *Id.* at 557.

73. *See id.* at 558.

74. *Id.*

75. *Id.* at 557–58. For a good summary of this story, see Scott Lenz, Note, *The Symmetry of the Realization Requirement and Its Application to the “Mortgage Swap” Cases*, 9 VA. TAX. REV. 359 (1989).

76. *Cottage Sav. Ass’n*, 499 U.S. at 565. The Court rejected the government’s contention that it had to evaluate “the attitudes of the parties, the evaluation of the interests by the secondary mortgage market, and the views of the [Federal Home Loan Bank Board]” to decide whether realization occurred. *Id.*

analyzed, the Court thought the swap met the “administrative purposes underlying the realization requirement in § 1001(a)” because it resulted in the parties having “legal entitlements that are different in kind or extent.”⁷⁷ The test was thus whether there was an ascertainable, reportable, and, verifiable change in *legal* relations: “as long as the property entitlements are not identical, their exchange will allow both the Commissioner and the transacting taxpayer easily to fix the appreciated or depreciated values of the property relative to their tax bases.”⁷⁸

Thus, the history of § 61 demonstrates that courts have interpreted the term “gross income” dynamically, giving it ever increasing reach.⁷⁹ Since *Eisner*, no competent federal court has found a constitutional limitation on what Congress can treat as “gross income.”⁸⁰ And yet the reach is indeed limited, limited by the practicalities of tax administration.

B. OPERATIONAL LIMITS ON LEGAL CONCEPT OF INCOME

Despite the constitutional *carte blanche*, significant operational issues limit the reach of § 61. These operational limits are reflected in statutes, case law, and administrative rules. Wherever found, they arise from the functional requirements of administering the law to a population of over 130 million taxpayers and ensuring compliance with the law.⁸¹ While it might seem that *Glenshaw Glass Co.* brought the legal definition of income in line with an economic concept of income, the

77. *Id.*

78. *Id.* The Court did not address exactly how much of a change in legal entitlements would be needed to constitute realization of income (or loss) nor did it explain why, if realization was merely an administrative concern, it should not defer to the IRS judgment of when realization had occurred. I discuss the realization requirement in more detail below.

79. See, e.g., *United States v. James*, 333 F.2d 748, 753 (9th Cir. 1964) (en banc) (emphasizing the flexible nature of gross income and overruling prior cases on whether certain distributions from decedent's estate were gross income), *cert. denied*, *James v. United States*, 379 U.S. 932 (1964). See generally WILLIAM N. ESKRIDGE, JR., *DYNAMIC STATUTORY INTERPRETATION* (1994).

80. For a brief moment, in an amazing display of technical ineptitude, a three-judge panel of the Circuit Court for the District of Columbia held in 2006 that money received for emotional and reputational damages was not “income” within the meaning of the constitutional term and so it was unconstitutional for Congress not to exclude it under § 104(a)(2). *Murphy v. IRS*, 460 F.3d 79, 92 (D.C. Cir. 2006). While one might be sympathetic to a policy argument for exclusion, the legal reasoning of the panel was downright embarrassing. For the scathing commentary of the tax law community, see Sheryl Stratton, *Experts Ponder Murphy Decision's Many Flaws*, 112 TAX NOTES 822, 822–25 (2006). The panel then vacated its decision *sua sponte* and ordered a panel rehearing. *Murphy v. IRS*, No. 05-5139 (D.C. Cir. Dec. 22, 2006) (vacating judgment and scheduling case for oral argument). The panel then reversed its earlier conclusion, although its opinion was still criticized as “sanctimonious crapola.” See TaxProf Blog, http://taxprof.typepad.com/taxprof_blog/2007/07/tax-profs-disse.html#comments (July 6, 2007).

81. In FY2006, the IRS received and processed over 177 million income tax returns. Since many were joint returns, the actual number of taxpayers is much higher. See INTERNAL REVENUE SERV., DEPT OF THE TREASURY, *INTERNAL REVENUE SERVICE DATA BOOK 2006*, at 4 tbl.2 (2006) [hereinafter IRS, DATA BOOK 2006].

practicalities of tax administration prevent “gross income” from ever reaching as far as the economic concept. This is because, unlike economics or other social sciences, laws do not merely describe or explain phenomena. Laws shape behavior and so laws must create rules that people—both those subject to the law and those who must administer it—can follow. “It is the essence of any system of taxation that it should produce revenue ascertainable, and payable to the government, at regular intervals.”⁸² Laws must also create rules that can be enforced. Hence, discussion of tax theory—including any normative discussion—cannot be divorced from implementation.

Practical operational issues have a profound influence on the legal concept of income and yet the interplay of tax administration and the law is significantly undertheorized.⁸³ The genius of the American political order is the recognition that human nature rarely aspires to perfection.⁸⁴ The genius of the American economic order is the recognition that human nature rarely places communal interest above self-interest.⁸⁵ The genius of the American tax system rests on the same insights. Our enviable compliance rate of almost 84%⁸⁶ relies on a discipline of self-reporting income supported by appeals to human greed (through over-withholding at the source) and fear (of being caught through third-party reporting and audit).⁸⁷ This system will break down when it demands

82. *Burnet v. Sanford & Brooks Co.*, 282 U.S. 359, 365 (1931).

83. See Bryan T. Camp, *Tax Administration as Inquisitorial Process and the Partial Paradigm Shift in the IRS Restructuring and Reform Act of 1998*, 56 FLA. L. REV. 1, 2 (2004); see also Leandra Lederman, *Statutory Speed Bumps: The Roles Third Parties Play in Tax Compliance*, 60 STAN. L. REV. (forthcoming 2007) (exploring how operational concerns make sense of otherwise theoretically incoherent distinction between treatment of reimbursed and unreimbursed employee expenses).

84. James Madison provides the classic analysis. See THE FEDERALIST No. 10 (James Madison). However, Hamilton’s analysis should also not be overlooked. See THE FEDERALIST No. 6 (Alexander Hamilton).

85. See ADAM SMITH, AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS (1776), reprinted in 39 GREAT BOOKS OF THE WESTERN WORLD 192 (Robert Maynard Hutchins ed., 1952).

86. *A Closer Look at the Size and Sources of the Tax Gap: Hearings Before the Subcomm. On Taxation and I.R.S. Oversight of the S. Comm. on Fin.*, 109th Cong. (2006) (written testimony of Mark J. Mazur, I.R.S. Director, Research, Analysis, and Statistics), available at <http://finance.senate.gov/hearings/testimony/2005test/072606mm.pdf> [hereinafter *Hearings*] (explaining how the IRS arrived at the 84% compliance estimate).

87. See generally Bryan T. Camp, *Tax Administration as Inquisitorial Process and the Partial Paradigm Shift in the IRS Restructuring and Reform Act of 1998*, 56 FLA. L. REV. 1, 5–6 (2004) (“The tax determination process ultimately rests on taxpayers disclosing their financial affairs and paying what they owe—through withholding or otherwise—without overt government compulsion. It is ‘voluntary’ in the same sense that stopping one’s car at a red light—at midnight with no traffic and no one looking—is voluntary. It is each citizen’s self-enforcement of the legal duty that keeps both the tax and transportation systems running smoothly.”). Congress has long recognized this feature:

Withholding improves voluntary compliance for several reasons. First . . . any incentive a taxpayer had to conceal or overlook the income . . . is reduced or converted to an incentive to report the income and claim the withholding credit. Second . . . information reports . . . are significantly more accurate. . . . Finally, withholding serves as an effective reminder to

taxpayers report income that is unreportable, pay tax on “phantom” income which has produced no means of payment, or makes suckers out of compliant taxpayers by imposing requirements that are practically unenforceable against noncompliant taxpayers.

The operational task is thus to find an administrable concept of “gross income,” a legal definition that can be applied in a uniform and coherent manner and that allows income to be reliably measured, reported, and paid. That task requires a basic appreciation of the bulk-processing nature of tax administration in modern society. After all, while § 1 imposes the tax and leads back, through § 63, to the base definition of “gross income” in § 61, none of those statutes impose the duty to report or pay the tax imposed by the statute, as the tax protestor community repeatedly delights in pointing out.⁸⁸ The payment duty is imposed by § 6151 and the reporting duty by § 6012(a)(1)(A), which requires “every individual having gross income which equals or exceeds the exemption amount” to make a return.⁸⁹

Operationally, tax administration depends upon taxpayers returning to the government a yearly report of the income tax consequences of their financial transactions. This is done on a document called a “return.” Given that the IRS processed over 177 million income tax returns and over 1.56 billion information returns in FY2006, one quickly sees why Congress has delegated to the IRS the power to regulate the reporting requirement.⁹⁰ The delegation appears in § 6011 which instructs taxpayers

taxpayers that the payments . . . should be reported as income.

S. REP. NO. 97-530, at 228 (1982) (explaining revisions to withholding requirements on interest and dividends). Hand in hand with withholding walks the fear-based Benthamite principle of surveillance. Third-party payors become the eyes of the government by sending in reports of payments made to taxpayers. Taxpayers whose income is subject to third party reporting, such as wages, report over 99% of their gross income. In contrast, income subject to little third-party reporting or withholding, is correctly reported only about 43% of the time. See Hearings, *supra* note 86. Appeals to greed and fear are further evidenced by the 2007 Turbo Tax contest on YouTube for a “tax rap” praising YouTube. YouTube, <http://www.youtube.com/contest/TheTaxRap> (last visited Oct. 31, 2007). After viewing approximately 120 of the 370 submitted raps, my admittedly impressionistic conclusion is that the tax refund is widely perceived as something akin to a windfall, with raps repeatedly referring to Turbo Tax’s ability to maximize refunds. The pitch is not “get more of *your* money back” but “get more money.”

88. See, e.g., *Newman v. Schiff*, 778 F.2d 460, 467 (8th Cir. 1985) (holding unenforceable Schiff’s unilateral promise to pay \$100,000 to the person who could first show him the statute that required taxpayers to pay taxes).

89. The “exemption amount” is \$3,400 for tax year 2007. James C. Young, *Inflation Adjustments Affecting Individual Taxpayers in 2007*, 113 TAX NOTES 157, 159 (2006). Section 6012(a)(1)(D) says the term “exemption amount” has the meaning given to it by § 151(d), which in turn defined the “exemption amount” as a base of \$2,000, to be adjusted for inflation after 1989.

90. See IRS, DATA BOOK 2006, *supra* note 81, at 4 tbl.2, 37 tbl.14 (income returns and information returns); see also *Parker v. Comm’r*, 365 F.2d 792, 800 (8th Cir. 1966) (“The Commissioner is certainly not required to accept any facsimile the taxpayer sees fit to submit. If the Commissioner were obligated to do so, the business of tax collecting would result in insurmountable confusion.”). It should not be surprising that Congress would leave such matters to the agency’s discretion. Congress

to use the “forms and regulations prescribed by” the IRS and to report the “information required by such forms or regulations.” The regulations in turn tell taxpayers to use the famous Form 1040.⁹¹ And so it is on the Form 1040 that the concept of “gross income” takes tangible, practical form.

The entire first section of the Form 1040 (lines seven through twenty-two in the 2006 Form) is devoted to asking taxpayers for detailed information about their income (usually their gross income, although some lines ask for income net of expenses), with the penultimate line being a catch-all for “other income.” Once taxpayers report their gross income, they then take various deductions to eventually arrive at their “taxable income.”

To many economists, the Form 1040 is exactly backwards in asking taxpayers to report their income first. Economists generally conceive of income as what *results* from changes in consumption and wealth over the reporting period; it’s the residual. The most often quoted formulation is that of Henry C. Simons: “Personal income may be defined as the algebraic sum of (1) the market value of rights exercised in consumption and (2) the change in the value of the store of property rights between the beginning and end of the period in question.”⁹² While Simons’ formula is not the only one and has been criticized as itself incomplete, it is still the view most widely taught and serves as well as any other to illustrate the gap between economic theory and administrative practicality.⁹³

This economic view of income does not translate well into tax law because it ignores the practical requirement that income be something that can be reliably measured, reported, and paid. For present purposes,

routinely delegates enormous discretionary powers to agencies. *See, e.g.,* *Whitman v. Am. Trucking Ass’n*s, 531 U.S. 457, 474 (2001) (collecting cases on delegation). Here Congressional delegation allows the IRS to administer the tax laws as far as practicable.

91. If none is available, the regulations allow taxpayers to submit a “statement . . . disclosing . . . gross income and the deductions therefrom.” *Treas. Reg. § 1.6012-1(b)* (as amended in 1967). That statement will be treated as a tentative return—thus meeting the taxpayer’s reporting obligation—so long as the taxpayer sends in the proper form “without unnecessary delay.” *Id.*

92. HENRY C. SIMONS, *PERSONAL INCOME TAXATION* 50 (1938). A failure to appreciate the relationship of the three terms may in fact lead a government to the fallacy of John Morton’s famous fork. Morton, appointed Lord Chancellor of England in 1487, reputedly said, “If the subject is seen to live frugally, tell him because he is clearly a money saver of great ability he can afford to give generously to the King. If, however, the subject lives a life of great extravagance, tell him he, too, can afford to give largely, the proof of his opulence being evident in his expenditure.” John Morton—Wikipedia, The Free Encyclopedia, http://en.wikipedia.org/wiki/John_Morton#_note-Powicke85, (last visited Oct. 31, 2007).

93. I recognize, of course, that the theories I attribute to “economists” as a class are not held by all, either historically or currently. In fact, some might be a minority position, depending on the universe of folks you count as “economists.” But, at least in my academic experience, I have repeatedly encountered these views and while I recognize that I’m being necessarily reductionist, I do not believe I am unfairly so. Should you disagree, please feel free to let me know.

what makes Simons' economic formula unhelpful for the law is that it measures income indirectly: only after determining consumption and wealth does one determine income. That is not only implicit in the structure of the equation, with income being the defined term, but Simons himself also made the point: "We do best, in general, to regard income not as something accruing or flowing with time—for such language is dangerously figurative—but merely as a result imputed to particular periods."⁹⁴

Simons' "best" has no grounding in administrative reality. In fact, current tax doctrine—as expressed in statutes, cases, and interpreted in administrative guidance—contains three operational limits, or exceptions, to what taxpayers must include as "gross income" on the Form 1040 which have as little to do with coherent economic theory as they do with constitutional theory. Rather, all three limits represent instances of economic income that are not treated as gross income because they present significant operational problems—whether of measurement, payment, or compliance. These doctrinal limits promote the self-reporting discipline necessary for modern tax administration by preventing government over-reach when income is too difficult to measure, too difficult to pay, or would require intolerable government intrusion into individual lives. The limits are: (1) "priceless" income for which there is no ascertainable fair market value; (2) "unrealized" income derived from appreciation of property; and (3) "imputed" income which arises from self-benefiting activity or the use of self-owned property. I shall discuss each in turn.

I. Priceless

The legal concept of income demands a readily ascertainable fair market value. Taxpayers cannot report as "gross income" an economic abstraction. This idea is plastered throughout the regulations governing what items constitute reportable income. For example, Treasury Regulation section 1.61-2(d) requires "the fair market value" of property or services received as compensation "must be included in income." Treasury Regulation section 1.61-14 provides that found property, known as treasure trove, constitutes gross income "to the extent of its value in United States currency" when reduced to undisputed possession. Treasury Regulation section 1.74-1(a)(2) requires that prizes and awards be reported as income to the extent of their "fair market value." The legal requirement for "fair market value" presupposes some objective method of valuation, some way that the tax system can verify what the taxpayer reports.⁹⁵ If there is no objective market value, if the value of an

94. SIMONS, *supra* note 92, at 100.

95. See Brian Hirsch, Comment, *The Extreme Home Renovation Giveaway: Constructive Justification for Tax-Free Home Improvements on ABC's Extreme Makeover: Home Edition*, 73 U.

item cannot be reduced to a readily ascertainable value in United States currency, there is no reportable income.

The idea is encapsulated by the popular commercial for Mastercard. If an employer rewarded an employee with a night on the town on his or her birthday, the resulting commercial might go something like this: "Rental of Limo for the evening: \$300. Dinner for two at 'Le Chic': \$200. Front row tickets to Rolling Stones concert: \$500. Mick Jagger asking you onstage and singing 'Happy Birthday' to you: Priceless." The evening results in \$1,000 gross income to the employee and not a dime more. Even though the "market value of rights exercised in consumption" that night is greater than \$1,000, one simply cannot reduce the experience of Mick Jagger singing "Happy Birthday" to a fair market value.

Priceless moments occur much more often than a Mick Jagger serenade. Watching one's daughter tie her shoes for the first time or seeing one's son play his first recital are priceless moments. So may be any number of other unique moments in life obtainable only in the absence of performing work for pay.⁹⁶ Accordingly, the personal choice not to work for hire is priceless.

For some economists, however, "the ideal measure of income would include leisure and would include in 'consumption' all goods and services that are components of the utility function."⁹⁷ To these economists, the economic value of leisure is easy to measure: it's your foregone wage. Thus one could view the parent who chooses to work twenty hours instead of forty hours per week as simply placing a higher economic value on being with the kids than the market places on his or her labor. One might therefore argue that a parent whose labor could command \$10 per hour therefore has income of at least \$200 from choosing to forgo twenty hours of work, and a parent whose labor could command

CIN. L. REV. 1665, 1671-76 (2005) (reviewing case law and methods of objective valuations and exceptions thereto).

96. *But see* WILLIAM SYDNEY PORTER, MAMMON AND THE ARCHER, in *THE COMPLETE WORKS OF O. HENRY* 53 (1953).

97. Victor Thuronyi, *The Concept of Income*, 46 TAX L. REV. 45, 52 (1990). Thuronyi refers to Henry Simons, a distinguished economist of the early 20th century. *Id.* Simons is no outlier:

As Haig stated, "[m]odern economic analysis recognizes that fundamentally income is a flow of satisfactions, of intangible psychological experiences." According to Professor Aaron, comprehensive income would include a household's consumption of goods and services provided by governments and nonprofit institutions. Professor Aaron argues that the Simons definition of income is arbitrary because it leaves out these elements of consumption. Simons would not, I think, have disputed this conclusion, but might have argued that omitting public goods and services is not fatal so long as they are distributed roughly in line with income. Under the traditional view of economists, the basis for the concept of income is obvious: Income is a measure of the economic utility experienced by the individual, the only issue being whether the underinclusiveness of the Simons definition is fatal to its validity. Professor Koppelman's recent suggestion that income should be considered as a measure of economic well-being is in line with this tradition.

Id. (citations omitted).

\$40 per hour has income of \$800.

While one *could* think of time in terms of money and so believe that time with the kids indeed has an economic value that can be expressed in dollar terms, the practical valuation problems make the idea unpalatable as sound basis for the legal definition of income. To the extent it encourages people to behave like rational wealth maximizers, it is poor social policy: as first year associates at large law firms quickly learn, thinking of every waking hour of the day as money earned or lost causes one's life to become—literally—unbalanced.⁹⁸ Worse, the economist's view creates significant valuation problems, not the least of which is between hourly-wage taxpayers and those on fixed incomes or salaries, and as between higher-earning and lower-earning parents, of how to tax the choice of which parent forgoes the twenty hours per week.

Thus, while time may be money in economic theory, it not so viewed by tax law, nor should it be. The legal concept of income departs from the economic concept here because valuation of the non-working time spent at leisure is subjective to each taxpayer and not amenable to market analysis. Time spent in leisure activity simply does not “produce revenue ascertainable, and payable to the government, at regular intervals.”⁹⁹

Some items of economic income may not be exactly priceless, but may be too difficult to link to a fair market value to qualify as legal “income.” Frequent flyer miles provide a concrete example of this operational limit. Many taxpayers travel on business with the travel paid for by their employer. They then receive credit for the travel in their personal frequent flyer accounts. Once they accumulate a certain number of miles or points, they can exchange them for free travel, as their personal needs or wants might dictate. If taxpayers cash out their miles, such as by billing a customer for a first class seat, but purchasing a coach class seat and using frequent flyer miles to upgrade to first class, the IRS will argue (and win) that they have income to the extent of the difference in value between the cost of the first class seat and the cost of the coach seat.¹⁰⁰ In such instances, they have translated their miles into dollars in a way that is ascertainable and reviewable. The actual transaction shows (and defines) the market.

Short of cashing out, however, it is all but impossible to find a reliably objective method to assign a fair market value to miles in a frequent flyer account.¹⁰¹ First, there is an issue of the relevant market.¹⁰²

98. This point is made repeatedly in the literature on the subject. For one excellent treatment, see Susan Saab Fortney, *The Billable Hours Derby: Empirical Data on the Problems and Pressure Points*, 33 FORDHAM URB. L.J. 171 (2005).

99. *Burnet v. Sanford & Brooks Co.*, 282 U.S. 359, 365 (1931).

100. See *Charley v. Comm'r*, 91 F.3d 72, 74 (9th Cir. 1996).

101. See *The Taxability of Frequent Flyer Credits Earned by Employees: Why the IRS has*

In most programs, frequent flyer miles can be redeemed in multiple markets apart from air travel. They can be redeemed for hotel stays, rental cars, and various types of merchandise. Second, even as to air travel, the market value of a flight between two points varies dramatically in response to market demand, oil prices, union strikes, time of day flown, type of aircraft available and assigned for the flight, competing carrier decisions, and a host of other factors that combine to cause almost hourly fluctuation in prices. Third, there is no robust secondary market for flyer miles because most contracts between carriers and flyers make the miles inalienable.¹⁰³ Fourth, there is currently no way to determine a taxpayer's basis in a set of miles cashed out. Flyers should get basis in miles purchased with their after-tax dollars but not in miles that are effectively received from their employers tax-free. But airlines do not track basis in their customers' accounts nor could they do so without elaborate changes to track both the source of acquisition of miles and their redemption as "personal" or "business" and cooperation by flyers to report to the airline how much of a trip is being reimbursed by someone else, or is used for business and not personal reasons.¹⁰⁴ Requiring such recordkeeping and reporting by taxpayers is administratively unpalatable.¹⁰⁵

Accordingly, while frequent flyer miles have economic value and their accumulation is an "accretion of wealth" within the economic meaning of "gross income," the impossibility of determining their fair market value led the IRS, in Announcement 2002-18, to assure taxpayers that it would *not* assert that a taxpayer had "understated his federal tax liability by reason of the receipt or personal use of frequent flyer miles or other in-kind promotional benefits attributable to the taxpayer's business or official travel."¹⁰⁶

Remained Silent on the Issue, 4 U. PA. J. LAB. & EMP. L. 643, 650 (2002). For a very good review of the literature on frequent flyer miles, see *id.* This paragraph summarizes the same literature she reviews.

102. *Id.*

103. Like RMT, however, determined flyers find ways to sell. While such a cash out transaction creates income, it does not create a "market" sufficiently transparent to form an objective basis for valuation of all miles.

104. Some commentators have suggested abandoning the attempt to find a fair market value and instead advocate assigning a uniform value to all miles. See, e.g., Dominic L. Daher, *The Proposed Federal Taxation of Frequent Flyer Miles Received from Employers: Good Tax Policy but Bad Politics*, 16 AKRON TAX J. 1, 18-19 (2001) (advocating a cents-per-mile approach). The IRS takes such an approach in valuing fringe benefit flights, for example. See Treas. Reg. § 1.61-21(g)-(h) (as amended in 1992). Although this bright line sword may cut through the knotty valuation problem, it does not help with the basis problem or the associated recordkeeping problem.

105. Imposing such recordkeeping burdens on taxpayers has long been thought to decrease voluntary compliance. See Deborah H. Schenk, *Simplification for Individual Taxpayers: Problems and Proposals*, 45 TAX L. REV. 121, 166-67 (1989) (discussing how complex recordkeeping requirements are commonly thought to breed noncompliance).

106. I.R.S. Announcement 2002-18, 2002-1 C.B. 621.

2. Realization

The realization requirement boils down to timing. Before an accession to wealth is reportable as gross income, it must be realized.¹⁰⁷ This requirement mediates between the economic idea of income and the practical needs of a system dependent on periodic reporting of transactions that may or may not have closed. It has less to do with economic theory and more to do with finding an administrable legal concept of gross income.¹⁰⁸ What constitutes a "realization event" is a practical inquiry which has turned out to be significantly path-dependent.¹⁰⁹ Generally, both case law and statutes are concerned that an

107. *Comm'r v. Glenshaw Glass Co.*, 348 U.S. 426, 431 (1955).

108. See Deborah H. Schenk, *A Positive Account of the Realization Rule*, 57 TAX L. REV. 355, 396 (2004) (concluding that "[s]ince neither an accrual tax or a pure realization rule is tolerable, the task for policymakers is to determine where along the continuum to draw the line"). The fissure between lawyers and economists on this point dates back to the early 20th century, when economists ignored the idea of realization and legal treatise writers treated it as a given. It is not that either group is wrong in an absolute sense. They just ask different questions. The answer to whether some increase in wealth constitutes "income" depends on why you want to know. Those who study economics have one answer. Those who have to collect taxes have another.

109. The American legal system depends on a concept of judicial precedent where the outcome of one case determines the range of potential outcomes in later cases. This is true even for highly codified areas of law like tax. An outcome in an earlier case may well block one or more paths to alternative outcomes in future cases. Actions by other legal institutions, such as Congress and the IRS, also affect the range of potential outcomes. One valuable service traditionally provided by the legal academy has been to expand the range of available choices by discovering new analytical paths for courts to use when addressing recurring issues. A good example of this dynamic between Congress, courts, commentators, and the IRS is found in *Commissioner v. Tufts*, 461 U.S. 300, 301-02 (1983), where the Court wrestled with how to treat relief from a non-recourse debt. Professor Wayne G. Barnett of Stanford had marked out the best approach to the problem, but the Court declined to adopt it. *Id.* at 310-12, 312 n.11. The majority agreed that the IRS approach, adopted by the Court in *Crane v. Commissioner*, 331 U.S. 1 (1947), had significant problems, notably that it "laid the foundation stone of most tax shelters." *Tufts*, 461 U.S. at 309 n.7 (citing Boris I. Bittker, *Tax Shelters, Nonrecourse Debt, and the Crane Case*, 33 TAX L. REV. 277, 283 (1983)). But while "a different approach might have been taken," the Court would "express no view as to whether such an approach would be consistent with the statutory structure." *Tufts*, 461 U.S. at 308, 308 n.5. It was just too late in the day because the government had pressed its case on ground already well trod. The Court would not deviate from the path previously chosen by the IRS and blessed by the Court. Justice O'Connor's concurring opinion explained why the Court accepted a "second best" resolution of the issue:

Persuaded though I am by the logical coherence and internal consistency of [Prof. Barnett's] approach, I agree with the Court's decision not to adopt it judicially. We do not write on a slate marked only by *Crane*. The Commissioner's longstanding position . . . is now reflected in the regulations. In the light of the numerous cases in the lower courts including the amount of the unrepaid proceeds of the mortgage in the proceeds on sale or disposition . . . it is difficult to conclude that the Commissioner's interpretation of the statute exceeds the bounds of his discretion. As the Court's opinion demonstrates, his interpretation is defensible. One can reasonably read § 1001(b)'s reference to "the amount realized from the sale or other disposition of property" . . . to permit the Commissioner to collapse the two aspects of the transaction. As long as his view is a reasonable reading of § 1001(b), we should defer to the regulations promulgated by the agency charged with interpretation of the statute . . . Accordingly, I concur.

event sufficiently “locks in” an objectively measurable increase in wealth before it be deemed a realization of income.¹¹⁰ While realization is typically considered in the context of determining income from property, it also comes into play in determining gross income from services. I shall discuss the latter first, and then the former.

a. Realization of Income from Services

As to services, realization of income occurs when a taxpayer receives, directly or indirectly, cash, property, or services in exchange for past, present, or future services (a.k.a. labor).¹¹¹ Neither labor nor the potential for labor contained in every taxpayer is itself considered wealth (at least under current cultural conditions). It is instead the engine of wealth; one’s labor increases one’s wealth only by the value of what is received, whether cash, property, or return services.

Barter transactions provide a good example of the concept of realization and its tie to tax administration. Consider the following transactions between two taxpayers, Lilly and Kunal.¹¹² Lilly is a lawyer who generally charges \$900 to prepare a basic will. Kunal is a skilled carpenter. He wants a will. She wants a bathroom cabinet.

Transaction 1 (cash). Kunal pays Lilly \$900 cash to prepare his will. Under § 61 Lilly has realized \$900 gross income because she now has cash she did not have, and there are few economic gains more readily ascertainable than cash. Kunal meanwhile, has received \$900 worth of legal services, in the form of a will, but since he consumed an equal amount of wealth to do it he has not actualized any increase in wealth and so has realized no income under § 61. Lilly uses the \$900 to buy a new bathroom cabinet for her home at Home Depot. The new bathroom

Id. at 317, 319–20 (O’Connor, J., concurring) (citations omitted).

110. See Scott Lenz, Note, *The Symmetry of the Realization Requirement and its Application to the “Mortgage Swap” Cases*, 9 VA. TAX. REV. 359, 360–75 (1989) (reviewing case law, and providing a lucid review of the history of the realization rule). Tax scholars generally agree that the realization requirement

is essentially a rule of administrative convenience premised on not inconsequential problems. It is founded on three concerns that, according to Treasury, “taken together, appear to be insurmountable.” They are: “(1) the administrative burden of annual reporting; (2) the difficulty and cost of determining asset values annually; and (3) the potential hardship of obtaining the funds to pay taxes on accrued but unrealized gains.

Noël B. Cunningham & Deborah H. Schenk, *Taxation Without Realization: A “Revolutionary” Approach to Ownership*, 47 TAX L. REV. 725, 742–43 (1992) (citing DEP’T OF THE TREASURY, BLUEPRINTS FOR BASIC TAX REFORM 81 (1977)).

111. Treas. Reg. § 1.61-2(d) (as amended in 2003); Rev. Rul. 83-163, 1983-2 C.B. 26 (taxpayer realized income in the year they received services in even though it was in exchange for future services) (citing Schlude v. Comm’r, 372 U.S. 128 (1963)). The receipt may be actual or constructive. Treas. Reg. § 1.451-2 (as amended in 1979). Realization of loss would happen when the transaction produces an economic decrease in wealth.

112. These are fictional characters and any resemblance to real, actual Lillys or Kunals is coincidental.

cabinet increases the value of her home, but since she spent \$900 for it, it does not represent a realization of any economic gain. She just traded one form of wealth for another.

Transaction 2 (direct barter). Kunal builds a bathroom cabinet for Lilly in exchange for her preparing his will. Lilly here realizes \$900 of gross income because she receives services worth \$900.¹¹³ She has, in effect, transformed her “wealth” of knowledge about the law into a bathroom cabinet. That the economic gain is in the form of a bathroom cabinet is irrelevant; gross income can be in any form.¹¹⁴ It is as if Kunal paid her \$900 cash and then she turned around and paid Kunal \$900 cash to build the cabinet. Viewed this way, one quickly sees how Kunal has now realized income, too. He is wealthier by \$900 because he did not spend any of his wealth to get the will. He spent only his labor and the realization event is the receipt of the will which actualizes the economic value of his carpentry skills.¹¹⁵

Transaction 3 (complex barter). Kunal and Lilly belong to a barter exchange or barter club. Through the club, Kunal installs windows for another member, and then later purchases Lilly’s will-preparation services. To join the barter club both Kunal and Lilly have signed a Terms of Service (TOS) agreement with the club owner, George, and they pay George a monthly membership fee of \$20. For that fee, George creates a trading account for them and they receive an equal number of “Trade Credit Dollars” (TC\$) in their account (i.e. TC\$20 per month). They can use those TC\$ to receive goods and services offered by other members and George takes a 10% commission for brokering the deal. Thus, if another member and Kunal agree for Kunal to install windows for \$1,000, George will move TC\$1,000 from the buyer’s account to Kunal’s account. In addition, George will also transfer another TC\$100 from the buyer’s account to his own account. In this way Kunal pays Lilly

113. See Rev. Rul. 79-24, 1979-1 C.B. 60. Lilly’s income is the value of the services provided, not the resulting value to her home. See the analysis in I.R.S. Chief Counsel Advisory 200431012 (July 30, 2004), available at 2004 WL 1701305, at *8 (holding that taxpayers who receive structural improvements under federal programs to elevate structures located on flood-prone properties must “include in income the value of the services being provided by the contractor, not the amount by which the value of the property is increased due to the elevation”).

114. Treas. Reg. § 1.61-2(d)(1) (stating that when services are paid for with other services or property, the fair market value of the other services or property taken in payment must be included in income). Case law creates a very strong presumption that the exchange is of equal fair market value so that if the value of one side of the swap is known (here, the \$900 for will preparation), that value will be attributed to the side of the exchange. *Phila. Park Amusement Co. v. United States*, 126 F. Supp. 184, 188 (Ct. Cl. 1954).

115. Note that this is why a loan repaid by services results in the borrower realizing income in the amount of the loan so repaid. The initial loan of money is not deemed a realization event because the law both obligates and expects the debtor to repay the money with future wealth. *Zarin v. Comm’r*, 916 F.2d 110, 115 (3d Cir. 1990). If the debtor repays with property or services, those transactions represent separate realization events which must be accounted for.

TC\$900 for the will (and also pays TC\$90 to George).

In transaction 3, Kunal, Lilly, and George all realize income at the time when George credits the various accounts with TC\$.¹¹⁶ This is because the Trade Credits *function* like cash, which can be viewed as simply the stored value of goods and services it can purchase.¹¹⁷ Kunal does not have to wait to get his will until some lawyer needs carpentry work. He can instead actualize the economic value of his carpentry skills into a form (Trade Credits) that he can use immediately to procure a will or almost anything else he wants in life. Like the receipt of any medium of exchange, the receipt of TC\$ represents a fully realized accession to wealth. It is a cash-equivalent.

Bartering illustrates the connection between realization and tax administration, and the tax system's potential response to human activity in virtual worlds. Bartering represents as much of a realization event as a transaction conducted in cash: in both situations a readily identifiable event (a market transaction) has occurred in which the taxpayer has actualized theretofore implicit wealth. Taxpayers consequently have a duty to report that transaction. But in the absence of cash, taxpayers may not understand they have reportable income and, if they do understand, may have difficulty in setting aside cash from other transactions to pay the resulting tax. Thus, when bartering is done informally and directly between taxpayers, there may be a high level of noncompliance in reporting the income received.¹¹⁸ Since it is very difficult to conduct one's affairs through direct barter, direct bartering occurs at a very low level, peripheral to the economy. Accordingly, with no systemic compliance issue, there is no administrative pressure to police these transactions systemically. Even though a few folks may escape reporting their economic gain as gross income, the leakage is small enough that it does

116. *Barter Sys., Inc. v. Comm'r*, 59 T.C.M. (CCH) 72, 77 (1990) (barter club realized income from commissions received in trade units, as well as property received from members in exchange for trade units); Rev. Rul. 80-52, 1980-1 C.B. 100 (barter club members realized income in "the taxable year in which the credit units are credited to their accounts," when such trade units "can be used immediately to purchase goods or services offered by other members of the club," and could be sold or transferred to another member of the club). The amount of income received will depend on the fair market value of the TC\$. *Compare* *Baker v. Comm'r*, 88 T.C. 1282, 1286 (1987) (finding each trade unit worth US\$1), *with* *Evans v. Comm'r*, 63 T.C.M. (CCH) 3001, 3003 (1992) (IRS failed to prove fair market value of trade units was more than US\$0.50), *and* *Wright v. Comm'r*, 48 T.C.M. (CCH) 215, 216 (1984) (parties stipulated that each trade unit was worth US\$0.67).

117. ADAM SMITH, *AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS*, reprinted in 39 *GREAT BOOKS OF THE WESTERN WORLD* 123 (Robert Maynard Hutchins ed., 1952).

118. For example, in support of its petition to enforce a John Doe summons against a barter club, the IRS provided evidence that approximately 50% of audited taxpayers who participated in barter clubs failed to report income from their bartering activities. *United States v. Coble*, 82-2 U.S. Tax Cases (CCH) ¶ 9506, at 84,815 (S.D. Iowa June 2, 1982). *See generally* *Hearings*, *supra* note 87 (reporting results of IRS compliance study showing that the 57% of taxpayers who are not subject to third-party reporting under-report their income).

not present significant issues of nonuniformity or incoherence in the law; it does not make suckers out of honest taxpayers.

Complex barter does create such problems as was seen when bartering became more regularized and connected to the wider economy in the mid 1970s, chiefly through the organization of formal barter clubs.¹¹⁹ By 1982, the value of goods and services exchanged through barter clubs had been growing by approximately 20% per year for about six years and was estimated to involve some sixty thousand barter club members exchanging some \$300 million annually.¹²⁰ This activity now presented a significant uniformity issue for tax administration in that the high level of non-compliance by barter club members made suckers out of honest taxpayers.

The IRS response to barter transactions was similar to the response to frequent flyer mile transactions: in both cases, the taxing authorities attempted to increase the uniformity of tax administration through a decision about the substantive tax issue. However, whereas the valuation issue of frequent flyer miles led the IRS to allow all taxpayers to omit them from gross income, barter transactions presented no such administerability problem. Accordingly, both the IRS and Congress moved to increase the uniformity of reporting barter transactions as gross income. The IRS established programs in 1979 to target barter members for audit and thus enforce the law on the back end.¹²¹ In 1982 Congress amended § 6045 to require barter club owners to send the IRS information returns and thus enforce the law on the front end.¹²²

b. *Realization of Income from Property*

As to property, it helps to understand that there are two ways property produces gross income. First, simply owning a piece of property might generate income. A taxpayer who owns stocks realizes income from dividends generated by the stock shares. A taxpayer who owns a duplex and rents it out realizes income from the rental payments. A taxpayer who owns bonds has income with each payment of interest.

119. See Robert I. Keller, *The Taxation of Barter Transactions*, 67 MINN. L. REV. 441, 485-512 (1982).

120. *Id.* at 485 (citing 128 Cong. Rec. 5831 (1982) (statement of Sen. Baucus)).

121. See *United States v. Pittsburgh Trade Exch., Inc.*, 644 F.2d 302, 307-08 (3d Cir. 1981) (rejecting barter club owner's contention that IRS research program targeting barter clubs rendered its John Doe summons unenforceable); *In re Tax Liabs. of Does*, 671 F.2d 977, 979-80 (6th Cir. 1982) (same); *Coble*, 82-2 USTC ¶ 9506, at 84,816 (IRS issued John Doe summons to barter club to obtain membership lists in order to obtain information on who to audit).

122. Tax Equity and Fiscal Responsibility Act of 1982, Pub. L. No. 97-248, 96 Stat. 600, § 311(a)(1). Treas. Reg. § 1.6045-1(c)(5) (as amended in 2006) imposes the requirement whenever there are more than one hundred exchanges in a year. The regulations deal with the measurement issue by deeming a barter exchange's "stipulated price" to be the fair market value of the exchange. Treas. Reg. § 1.62-2(d) (1990). Professor Keller discusses this concept in *The Taxation of Barter Transactions*, *supra* note 119, at 456-57.

Second, property may produce income when it is sold, exchanged, or otherwise disposed of. The shareholder may realize a gain on the sale of the stock shares. The landlord may realize a gain on the sale of the duplex. The bondholder may realize a gain on redemption of the bond.¹²³

As to the first way of receiving income from property, the realization event is the actual or constructive receipt of the income by the person who owns the income-producing property. *Commissioner v. Horst* concerned the question of who was taxed on bond interest paid to a son based on coupons given him by his father.¹²⁴ The Court held that the father had to pay tax even though the cash actually flowed to the son because the father owned the bond that produced the income.¹²⁵ The Court linked the concept of realization to the owner of the property with this reasoning: "The power to dispose of income is the equivalent of ownership of it. The exercise of that power to procure the payment of income to another is the enjoyment, and hence the realization, of the income by him who exercises it."¹²⁶ But that holding did not change the fact that the realization *event* is the payment of the income produced by the property. It just decided that upon the realization *event* of payment, it was the owner who had actualized his economic gain, not the son.¹²⁷ Thus, the owner of property is not deemed to have exercised the power to distribute income until the year the cash flows.¹²⁸

The second way of receiving income from property is governed by § 1001. Its regulations require that the realization event result in the receipt of either cash or of "property differing materially either in kind or in extent."¹²⁹ Thus, the focus is on finding a suitably identifiable *legal* event by which the taxpayer actualizes the economic abstraction of appreciation.¹³⁰ One can read *Macomber* as deciding only that a payment

123. This distinction is expressed often in the case law. *Compare, e.g.,* *Hort v. Comm'r*, 313 U.S. 28, 30 (1941) (income from cancellation of lease represented substitute for lost future rents), *with* *Metro. Bldg. v. Comm'r*, 282 F.2d 592, 594 (9th Cir. 1960) (income from sale of lease represented sale of entire property). It is indeed one of the basic ideas behind the assignment of income doctrine. *Comm'r v. Horst*, 311 U.S. 112, 115 (1940) ("The holder of a coupon bond is the owner of two independent and separable kinds of right. One is the right to demand and receive at maturity the principal amount of the bond representing capital investment. The other is the right to demand and receive interim payments of interest on the investment in the amounts and on the dates specified by the coupons.").

124. *Horst*, 311 U.S. at 114. Again, this Article deals only with individual cash-method taxpayers.

125. *Id.* at 120.

126. *Id.* at 118.

127. *Id.* at 117 ("The enjoyment of the economic benefit accruing to him by virtue of his acquisition of the coupons is realized as completely as it would have been if he had collected the interest in dollars and expended them for any of the purposes named.")

128. *Friedman v. Comm'r*, 41 T.C. 428, 436 (1963) ("A cash basis taxpayer is not taxable on income until he receives it actually or constructively. The making of a gift of his right to receive income does not cause such income to be received until the donor derives the economic benefit of having the income received by his donee."), *aff'd*, 346 F.2d 506 (6th Cir. 1965).

129. Treas. Reg. § 1.1001-1(a) (as amended in 2007).

130. Or, as Professor Kornhauser puts it, "some transaction, usually a market transaction, must

of a pure stock dividend is not an appropriate realization event because the appreciation thus represented “still remains the property of the company and subject to the business risks which may result in wiping out the entire investment.”¹³¹ Mrs. Macomber had no change in her economic position but, more importantly, she had no change in her legal relationship with the corporation or the other shareholders.¹³² This focus on legal relations sometimes leads courts to find a realization event even in the absence of a change in economic position.¹³³

Consider again our taxpayers Lilly and Kunal. Kunal wants a will. Instead of paying Lilly with cash, he pays her by transferring two shares of Google stock with a fair market value of \$900 that he had purchased for \$100 each. This swap is again a realization event for Lilly because she has acquired property worth \$900 in exchange for her services. It is not simply transforming her wealth from one form to another because it is labor that creates wealth. Here, Lilly’s labor as an attorney results in her accession to wealth in the amount of \$900, clearly realized by the event of the stock transfer. It is just like Kunal paid her \$900 cash and she used the money to buy the two shares of Google stock. Thus, although she has to report the \$900 as gross income, she also gets a basis of \$900 in the stock, which will determine the amount of her gain or loss on a later disposition of the stock.

The swap of property for services is also a realization event for Kunal. While he has spent \$900 of his wealth for the will, part of that \$900 represents a previously untaxed increase in wealth. It was untaxed because he had not changed his legal relationship to the stock and thus there was no readily trackable event, except the passage of time, to mark his accession to that wealth. There was no event that locked in his gain until the swap. Thus, because he simply held the stock and did not engage in any financial transaction with it, he was not required to include the \$700 of appreciation as gross income at any time previously. Now, however, by transferring the stock to Lilly in exchange for a will he has engaged in a transaction which changed both his legal and economic

occur which changes the taxpayer’s relationship to the asset.” Marjorie E. Kornhauser, *The Story of Macomber: The Continuing Legacy of Realization*, in *TAX STORIES* 55 (Paul Caron ed. 2003).

131. *Comm’r v. Glenshaw Glass Co.*, 348 U.S. 426, 431 (1955); see also MARVIN CHIRELSTEIN, *FEDERAL INCOME TAXATION* 80 (10th ed. 2005) (suggesting why, “stripped of its Constitutional element” the Macomber majority “had the better of the debate” over whether a true stock dividend should be treated as a realization of income).

132. Professor Chirelstein compares that result with the cases holding that a bond dividend is a realization event. CHIRELSTEIN, *supra* note 131. He notes how the legal position of a bondholder is significantly different than that of a shareholder. *Id.* at 82–84 (citing to *Bazley v. Comm’r*, 331 U.S. 737 (1941)).

133. In *Cottage Savings Ass’n v. Commissioner*, the Supreme Court decided that a change in legal relations was sufficient to trigger realization for § 1001 purposes even though, like Mrs. Macomber, the taxpayer was still subject to the same business risks after the mortgage portfolio swap than before. 499 U.S. 554, 565 (1991).

position in the Google stock.¹³⁴ The § 1001 formula ensures that he does not have to report more than the appreciation as income because his cost basis in the stock was \$200. So his reportable gross income is \$700.

The connection between the realization requirement and the operational limits to § 61 arises from the fact that a legal change in relations may not reflect true economic change (or vice versa).¹³⁵ On the one hand, Congress sometimes responds to this disparity between legal form and economic substance by allowing gain to go untaxed even though an administratively trackable event has occurred whereby the taxpayer has locked in an objectively measurable gain in wealth. For example, Congress responded to *Bruun* by enacting §§ 109 and 1019: even though the lease termination was a change in legal relations that resulted in the taxpayer's undeniable economic gain, it did not meet the need for a rule that allowed income to be reliably measured, reported, and *paid*. The operational concern was cash flow. So Congress created a cash-out rule. Similarly, Congress created a cash-out rule for certain investment transactions in § 1031 by providing that a straight swap of like-kind property would not result in reportable gross income. The complex rules under § 1031 attempt both to ameliorate the perceived harshness of a premature realization and to align taxpayers who use different legal means to achieve the same economic ends. To the extent taxpayers attempt to cash out of investments, § 1031 and its regulations require the cashed out value be reported as gross income.

On the other hand, Congress sometimes extends the reach of § 61 to grab appreciation in property even where there is no closed transaction to mark the taxpayer's undeniable accession to wealth over which it has complete dominion. For example, the § 1256 mark-to-market rule for certain commodity futures contracts makes the mere passage of time the "event" marking the accession of wealth, even though the taxpayer has neither "locked in" nor "cashd out" the gain represented by the appreciated property.¹³⁶ While the legislative history suggests an analogy to constructive receipt, the better analysis is that § 1256 imposes constructive realization because taxpayers were using these types of financial instruments to manipulate timing of losses and gains.¹³⁷ In the

134. See *Int'l Freighting Corp. v. Comm'r*, 135 F.2d 310, 313 (2d Cir. 1943).

135. See *Cottage Savings Ass'n*, 499 U.S. at 566.

136. The idea of accrual is found in popular culture as well as tax and accounting theory. See RY COODER, *The Taxes on the Farmer Feed Us All*, on INTO THE PURPLE VALLEY (Reprise Records 1971) ("We worked through Spring and Winter, through Summer and through Fall / But the mortgage worked the hardest, and the steadiest of us all. / It worked on nights and Sundays, it worked each holiday. / It settled down among us and it never went away.").

137. *Murphy v. United States*, 992 F.2d 929, 931 (9th Cir. 1993) (holding that the issue is one of constructive receipt). See generally David F. Levy, *Towards Equal Tax Treatment of Economically Equivalent Financial Instruments: Proposals for Taxing Prepaid Forward Contracts, Equity Swaps, and Certain Contingent Debt Instruments*, 3 FLA. TAX. REV. 471 (1997) (explaining ability of taxpayers to

world of financial instruments, there is little concern about annual valuation or liquidity.

In these ways, Congress reacts by aligning the realization requirement with economic substance to address operational problems that result from either premature or belated realizations.¹³⁸ So it is not quite accurate to say that unrealized increases in economic wealth are not gross income. A more accurate statement might be that increases in wealth which either the IRS, the courts, or Congress have *deemed* to be unrealized are excluded from the reach of § 61, while increases in wealth which have been *deemed* to be realized are included. In both cases, the legal definition of “realization” can be seen as a tax administration concept as much as a substantive tax concept: it is a search for administrable definition that can be applied in a uniform and coherent manner and allows income to be reliably measured, reported and paid.

3. *Imputed Income*

The lack of either ascertainable fair market value or a sufficient realization event are not the only operational limits on the reach of § 61. Taxpayers daily realize “a flow of satisfactions from . . . goods and services arising out of the personal exertions of the taxpayer on his own behalf.”¹³⁹ This economic income may have both readily ascertainable value and may be fully realized by the taxpayer. And the tax system won’t touch it. There are two types of this kind of income, known as imputed income. First, taxpayers commonly realize economic value from self-benefiting activities, done either alone or in groups. Second, taxpayers commonly realize economic value from using self-owned property. I shall discuss each in turn.

a. *Imputed Income from Services*

Income imputed to self-benefiting services is not included in the legal definition of “gross income,” even where there is a measurable market value to the services and the taxpayer clearly realizes the benefit. For example, the value of shaving, cleaning house, or fixing a meal can be measured by what one pays for such services. People routinely decide to cut their child’s hair, paint their own homes, change the oil in their car, and do any number of other activities themselves, rather than pay

manipulate gains and losses through various financial instruments). Reliance on the constructive receipt doctrine is well critiqued by Henry Ordower in *Revisiting Realization: Accretion Taxation, The Constitution, Macomber, and Mark to Market*, 13 VA. TAX REV. 1, 74 (1993) (concluding “[m]arking to market measures and requires the taxpayer to include in income the gain or loss a taxpayer *would* realize if the taxpayer sold or exchanged the underlying property. We might characterize marking to market better as the doctrine of constructive sale or constructive realization.” (emphasis added)).

138. Other times, particularly in statutes that exempt certain gains from income, such as the exemption for home sale gain in § 121, Congress permanently excludes gain from income for substantive tax policy reasons.

139. Donald B. Marsh, *The Taxation of Imputed Income*, 58 POL. SCI. Q. 514, 514 (1943).

someone else for the service. Yet there is no attempt to categorize the resulting increase in wealth from these self-benefiting activities as gross income. While theorists worry that taxing imputed service income would incline taxpayers to “idleness” (why work in your garden if it increases your taxes?), the true reason is operational.¹⁴⁰

Tax administrators would go nuts trying to enforce a regime that attempted to measure the economic utility experienced by every individual. This is so for two reasons. First, because the economic gain is created outside a market, there is difficulty in pegging it to the correct market. “The special feature of imputed income is that it arises outside the normal process of the market.”¹⁴¹ While it is easy to say “money saved is money earned” it is harder to determine “how much” money is saved. The answer depends on what analogous market transaction one chooses as a surrogate. The myriad markets imaginable for most activities make accurate assessment a mess. Audits would be exercises in futility (“We have adjusted the value of your self-prepared evening meal on August 6th, Ms. Ray, because we conclude it was much more than the cost of a meal at Burger King”).

Second, and perhaps more importantly, the sheer volume of small dollar transactions would create an administrative nightmare for taxpayers and the IRS alike. With a current audit rate of less than one return in 109, the difficulty in policing accurate reporting would make suckers out of honest taxpayers.¹⁴² For example, if I am a tax lawyer, I have an excellent idea of the fair market value of my tax preparation services. But my preparation of my own tax return does not result in income to me.¹⁴³ Bargain purchases are another example. Taxpayers are generally not required to report as gross income the difference between the purchase price of a piece of property and its fair market value.¹⁴⁴ If the tax system were to attempt to corral this type of imputed income, it

140. *Id.* at 520.

141. Mark A. Haskell & Joel Kauffman, *Taxation of Imputed Income: The Bargain-Purchase Problem*, 17 NAT'L TAX J. 232, 233 (1964) (citing Marsh, *supra* note 139, at 514 (quotations omitted)).

142. Allen Kenny, *IRS Disputes Study Claiming Millionaires Get Minimal Audit Scrutiny*, TAX NOTES TODAY, Mar. 29, 2006, at 2, available at LEXIS, 2006 TNT 60-3 (“Overall, of the 131 million individual returns filed in 2005, 1.2 million were examined, equating to an audit rate of just over 0.9 percent, a 20 percent increase over the prior year.”).

143. *Benjamin v. Hoey*, 139 F.2d 945, 946 (2d Cir. 1944) (“[W]hat one pays to one’s self cannot be part of one’s income.”).

144. See Haskell & Kauffman, *supra* note 141, at 235–39 (collecting cases). If the relationship between the buyer and seller suggests that the “bargain” component of the purchase is really something other than self-provided benefit—disguised compensation for example—the imputed income is taxed. *Id.* at 236. Thus a real estate agent cannot buy one of her listings for the sales price less her commission. *Id.* Similarly, Congress has acted to tax imputed income from “bargain” loans (loans issued with no interest, for example) where the relationship between the parties suggests that the foregone interest represents a disguised transfer, that it is not truly self-provided benefit. I.R.C. § 7872 (2000).

“would subject every purchase to [IRS] scrutiny in order to determine whether or not a bargain had taken place.”¹⁴⁵ Such intrusion by the IRS would be intolerable. For these two reasons, then, asking taxpayers to track, report, and value all “self-purchased” activities that have some analogous fair market value would be laughably unadministrable.

Two concrete examples show the nature of the imputed income limit to “gross income.” The first occurred in the 1950s in connection with the dependency deduction. The second exists even today in informal carpooling and babysitting arrangements. I will discuss each in turn.

For a brief time in the 1950s the IRS tried to measure the imputed economic value of services such as cooking and cleaning. The resulting administrative nightmare forced the IRS to abandon the effort. While the issue arose in the context of deduction and not income, the story of this misadventure illustrates the perils of divorcing discussion of the tax base from discussion of tax administration.

The current dependency deduction first appeared in the 1944 Individual Income Tax Act, part of that series of statutes during World War II by which Congress changed the “class tax” on upper income taxpayers to a “mass tax” on middle income taxpayers.¹⁴⁶ Recognizing that the new income provisions would now apply to masses of people, the tax writers made simplification a chief goal of their legislative efforts.¹⁴⁷ As part of this effort, Congress expanded and simplified the deduction for “dependents.” Previously, a “dependent” was classified as someone who was incapable of any self-support. Congress eased that requirement by allowing a taxpayer who provided over half of a person’s support to claim that person as a dependent.¹⁴⁸

Computing the new support requirement was tricky. Until 1957, the IRS followed an “actual expense” rule to decide whether a taxpayer had

145. Haskell & Kauffman, *supra* note 141, at 235–36.

146. Individual Income Tax Act of 1944, Pub. L. No. 78-315, 58 Stat. 231; *see also* Carolyn C. Jones, *Class Tax to Mass Tax: The Role of Propaganda in the Expansion of the Income Tax During World War II*, 37 BUFF. L. REV. 685, 686 (1988) (stating that the number of taxpayers rose from 7 million to 42 million). The WWII legislation dramatically increased coverage. *Id.*; *see also* Alan L. Feld, *Fairness in Rate Cuts in the Individual Income Tax*, 68 CORNELL L. REV. 429, 433–34 (1983) (“When the number of households covered by returns is considered, the coverage of the tax system was extended from about 5% to 74% of the population.”).

147. H. R. REP. NO. 78-1365, at 1 (1944) (Report of the House Ways and Means Committee on the Individual Income Tax Bill of 1944). The Report lists five objectives, all of which involve some form of simplification. *Id.* at 1–2. For example, Congress created the standard deduction, in large part, to simplify returns for most taxpayers. *Id.* at 4; *see* Feld, *supra* note 146, at 439.

148. H. R. REP. NO. 78-1365, at 5 (“Instead, there will be substituted the concept that a dependent is anyone for whom the taxpayer furnished over half the support. . . . The present law requirement that a dependent over 18 must be incapable of self-support is unnecessarily limited and confusing.”). With some modifications, that requirement is still in the current definition in I.R.C. § 152(c)(1)(D) (for “qualifying child”) and I.R.C. § 152(d)(1)(D) (for “qualifying relative”).

provided more than half of a dependent's support.¹⁴⁹ On April 26, 1957, the IRS issued a new regulation to conform to a 1955 Tax Court decision holding that a married couple could count the fair market rental value of lodging in their home as support and so could claim the wife's mother (who lived with them) as a dependent.¹⁵⁰ The new regulation not only counted the fair market value of lodging towards the support requirement, but also counted the fair market value of "services or other benefits."¹⁵¹ On August 22, 1958, however, the IRS amended the regulation to delete the "services or other benefits" language.¹⁵² The IRS explained: "The Regulations providing for the valuation of services proved extremely difficult to administer. It was virtually impossible to arrive at a proper value for support furnished in the form of services"¹⁵³

Despite the change in the regulations, taxpayers continued to argue that the value of their services should count in computing support for a claimed dependent. They lost. In *Bartsch v. Commissioner*, the Tax Court rejected the taxpayer's attempt to include the value of services (such as cooking and cleaning) she provided to her mother.¹⁵⁴ The court held that valuation of personal services was incredibly impractical:

[I]t is beyond our comprehension why or how such services must be measured in the market place, or anywhere. How can a *quantum meruit* be put upon a daughter's care for an aged mother? Do we balance our judgment of such 'value' against the 'value' of the personal satisfaction which the daughter in this case receives in giving such care? . . . We say no. The term 'support' in the Code must mean something more than furnishing the ordinary kindnesses and helpfulness and the cooking and the cleaning and the dishwashing that one able member of a household furnishes another less able. These things are not to be valued in the market for tax purposes.¹⁵⁵

Other courts agreed and approved the IRS rule counting only actual dollars spent plus the fair market value of property provided towards the support requirement.¹⁵⁶ Even though the courts recognized that the IRS rule favored wealthier taxpayers who could afford to pay for services that poorer taxpayers self-provided, they found that the "administrative

149. See, e.g., Rev. Rul. 53-235, 1953-2 C.B. 23. The IRS would count only the actual dollars spent to determine support and would not count the market value of property provided to the dependent. *Id.* at 23.

150. *Blarek v. Comm'r*, 23 T.C. 1037, 1039 (1955).

151. T.D. 6231, 1957-1 C.B. 77.

152. T.D. 6302, 1958-2 C.B. 53.

153. *Markarian v. Comm'r*, 352 F.2d 870, 873 n.3 (7th Cir. 1965) (reporting statement of the IRS before the Tax Court).

154. *Bartsch v. Comm'r*, 41 T.C. 883, 886-87 (1964).

155. *Id.*

156. *Markarian*, 352 F.2d at 873, *cert. denied*, 384 U.S. 988 (1966).

exigencies tip the scales” in favor of the IRS rule.¹⁵⁷

What is striking about this brief historical episode in tax doctrinal history is that while some of the activities were “priceless” in that there was no relevant market, both the IRS and courts recognized that even if the market value of rights exercised in consumption was ascertainable, the attempt to convert such activity into reportable transactions would stumble over the second insurmountable administrative problem I outlined above: intrusive oversight. The rejected regulations required the IRS to scrutinize myriad small transactions and determine value that was significantly subjective, not because of a lack of a market, but because there were too many potentially relevant markets. And that was for a rule trying to reduce tax, not impose it!

The second concrete example of the imputed income exception to “gross income” is found in the everyday swaps of self-service activities of taxpayers in carpooling and babysitting. As discussed above, tax law has long taxed bartering of services. Revenue Ruling 79-24 is the foundational ruling, where the IRS ruled that a lawyer and a housepainter who traded services each had to include the fair market value of those services into their respective gross incomes.¹⁵⁸ However, the IRS has refused to extend the Revenue Ruling to bartering arrangements involving “the informal exchange of similar services on a noncommercial basis” where there is no “creation of contractual rights and obligations among members.”¹⁵⁹

Under the IRS ruling, if a group of co-workers decide to carpool together, they do not have to report the value of the transportation services they receive from each other as income, even though each member of the carpool has received economic wealth from the swap. Similarly, a group of families who swap child-care services are not taxed on the economic wealth they thereby create for each other in the same-service trade. The basis for the IRS position is not that these activities just “save money” and so are not income. There are plenty of other situations where what looks like “saving money” to the taxpayer looks like “income” to the law. For example, performing house-sitting services in exchange for free rent is also just “saving money,” yet the value of the unpaid rent is unquestionably gross income.¹⁶⁰

I submit that the basis for the IRS excluding the income generated by informal same-service swaps stems from the same administrative

157. *Id.*

158. Rev. Rul. 79-24, 1979-1 C.B. 60.

159. I.R.S. Priv. Ltr. Rul. 96-08-009 (Nov. 9, 1995).

160. See I.R.S. Field Serv. Advisory (May 13, 1996), 1996 WL 33320879 (concluding that taxpayers who were recruited to occupy and maintain high-priced homes that were being listed for sale, in order to enhance the marketability of the home, had to include the fair rental value of the home in gross income).

concerns that stay the hand of government for other forms of imputed income: valuation and administrative intrusiveness. Take child care, for example. The tax law does not tax as gross income the self-benefiting child-care services of a stay-at-home parent, for the reasons I covered in looking at dependency deduction history above. The swap by stay-at-home parents of child care services is really no different—it is also self-benefiting activity. Each parent has the ability to provide the same service and, as to same-service swaps, informal swapping of those same services is simply enhanced self-created benefit. It is therefore excluded as imputed income for the same two reasons why the simple self-provided service of child-care is excluded: valuation and administrative intrusiveness.¹⁶¹

b. Income Imputed from Property

The strongest case for including imputed income as part of gross income has historically been made for the value of an owner's use of tangible property, such as owner-occupied housing or consumer durables.¹⁶² While at one time the Supreme Court suggested that Congress could not constitutionally tax income imputed from property, that was in reliance on *Macomber* formalism.¹⁶³ The Supreme Court has since abandoned *Macomber* and repeatedly said that Congress has meant for § 61 to reach as far as constitutionally permissible. Taking that statement seriously means that the *legal* definition of income in § 61 should reach imputed income from ownership of homes and consumer durables. This is because there is no economic difference between the taxpayer who buys a condo for \$100,000 cash and one who invests that \$100,000 and uses the return on investment to rent the same condo in the same building. Since § 61 reaches the latter taxpayer's return on

161. One might usefully view the exclusion of imputed service income as resulting from the government's reluctance to penetrate certain closed economic systems. The self-benefitting activity of an individual can be viewed as a closed economic system of one. For carpools and babysitting clubs, the closed systems have multiple participants, but they still do not produce wealth beyond the swap of like-kind services that stay within the system. That fact, plus the intrusion into daily life required to extend taxation into the closed system activity, form again the twin operational barriers of valuation and intrusion. I am indebted to Christopher Bruner for the closed economic system description.

162. See CHIRELSTEIN, *supra* note 131, at 26–28 (10th ed. 2005) (describing the case for taxing imputed income from property); see also Marsh, *supra* note 139, at 535–36.

163. The case was *Helvering v. Independent Life Insurance Co.*, 292 U.S. 371, 377 (1934), where the taxpayer owned a building, occupying a portion and renting out a portion. The applicable statute required the taxpayer to reduce its deduction for building operations by the amount of income imputed to its use of the building. *Id.* The Court read the statute at issue as requiring inclusion of imputed income, but only for the purpose of determining the correct deduction allowed by the statute. *Id.* at 379. In so doing, the Court remarked that “[i]f the statute lays taxes on the part of the building occupied by the owner or upon the rental value of that space, it cannot be sustained, for that would be to lay a direct tax requiring apportionment.” *Id.* at 378. The Court's actual holding thus allowed the inclusion of imputed income as an accounting device, adopting the rationale of the dissenting circuit court judge. See *Comm'r v. Indep. Life Ins. Co.*, 67 F.2d 470, 474 (6th Cir. 1933) (Tuttle, J., dissenting).

investment (and gives no deduction for the rent), it should reach the former taxpayer's "return on investment" in the home: the economic income imputed from ownership is neither priceless nor unrealized.¹⁶⁴

Nonetheless, the law excludes it, because otherwise the operational problems in determining what income to impute from property ownership would render enforcement of the law so uneven as to be arbitrary and would so make suckers out of honest taxpayers. First, to be administrable, there would have to be a uniform method of measuring the utility of property ownership. Since there is no actual market transaction, one must use analogy to create an imputed value. But imputing income from the use of self-owned property ends with the same administrative problem as does imputing income from services because the long-term assets like homes have aspects of both consumption and investment. For example, a homeowner who is handy purchases a fixer-upper. The self-benefiting activities of painting and plumbing and the like are not only self-consumed services, but also might add value to the lived-in property, over and above any unrealized appreciation in the marketplace. Or they might not. Any competent real estate agent will tell you how personal realty is and how homeowners typically overvalue their homes, in part, because of their emotional attachment (which economists might lump with other consumption aspects in a "utility" box). Part of the joy of owning a home is being able to build the fireplace in the bedroom, take out all the closets, or pour concrete all over the front yard (a favorite West Texas landscaping technique). Putting a lime green Jacuzzi in the kitchen probably represents more consumption than investment.

Second, the same administrative reasons that counsel against taxing unrealized appreciation counsel against taxing the imputed income from self-owned property. Just as the fair market value of property fluctuates over time, as does the market against which it competes as an "investment," so would the imputed value of its ownership. The administrative basis for excluding imputed income from the legal definition in § 61 is explained each year in the Joint Committee on Taxation's report on Tax Expenditures:

The individual income tax does not include in gross income the imputed income that individuals receive from . . . owner-occupied homes and durable goods. However, the Joint Committee staff does not classify this exclusion as a tax expenditure. The measurement of imputed income for tax purposes presents administrative problems and its exclusion from taxable income may be regarded as an

164. In fact, the Civil War income tax provisions did allow a deduction for residential rental payments. The first Commissioner of Internal Revenue objected that this arrangement led to evasion and he recommended instead that the symmetry be maintained by taxing owners on their imputed income and not allowing renters a deduction. SELIGMAN, *supra* note 35, at 439.

administrative necessity.¹⁶⁵

4. Summary

This review of the three operational limits to the reach of § 61's definition of "gross income" illustrates why the legal meaning of income cannot be coterminous with the economic meaning of income. Either Congress, the courts, or the IRS may conclude that a taxpayer who has acceded to wealth in an economic sense has not acceded to wealth within the legal sense of § 61. Ted Castranova's finding that virtual worlds generate significant economic activity raises a big red flag to taxing authorities, who are bullish on finding new sources of revenue for the government.¹⁶⁶ But one must apply the *legal* concept of income—not the economic concept—to see whether and to what extent online activity within virtual worlds generates gross income reachable by § 61. The function of the legal definition of income is not only to produce revenue to the government but also to limit government overreach and thereby preserve the proper balance necessary to fairly administer the tax laws and maintain the discipline of voluntary compliance.

III. APPLICATION OF TAX PRINCIPLES TO VIRTUAL WORLDS

To understand why in-world transactions are not and should not be taxable it is important to first examine the alternate approach: a "cash out" rule epitomized by RMT. Subsection A explains why RMT is taxable. Subsection B then applies basic tax principles to activity within World of Warcraft and Second Life to explain why there is a substantial argument for taxation of in-world transactions in both games. The subsection considers and rejects taxpayer arguments that taxpayers do not realize ascertainable gains in wealth as a result of in-world transactions. Subsection C then advances my thesis that the concept of imputed income provides the appropriate protections for taxpayers in all virtual worlds and, more importantly, tells us at what point in-world transactions ought to become taxable.

As a preliminary matter, I should note that I take a robustly external view of virtual worlds.¹⁶⁷ They are, at least at the present time and for present analytical purposes, two-dimensional representations controlled by computer code. A virtual sword is not an object; it is object coding.¹⁶⁸ And, unlike some scholars, I do not regard the object code for a virtual

165. STAFF OF JOINT COMM. ON TAXATION, 109TH CONG., ESTIMATES OF FEDERAL TAX EXPENDITURES FOR FISCAL YEARS 2006–2010, at 5 (Joint Comm. Print 2006).

166. Castranova, *supra* note 13, at 34–36.

167. Cf. Orin S. Kerr, *The Problem of Perspective in Internet Law*, 91 GEO. L.J. 357, 357 (2003) (defining "external perspective").

168. Yochai Benkler, *There is No Spoon, in THE STATE OF PLAY: LAW, GAMES, AND VIRTUAL WORLDS* 180, 180–89 (Jack M. Blakin & Beth Simone Noveck eds., 2006).

sword as “existing” in any sense outside the context of the game.¹⁶⁹ It is not a series of zeros and ones that stands alone; it is a series of zeros and ones that forms a relation with other zeros and ones to create the illusion of a virtual sword *in a specific virtual space*. As Richard Bartle, one of the preeminent designers of virtual worlds, explains:

All virtual objects are defined by the virtual world’s code. That is not just one piece of code, but the sum of the code, along with all the data it operates on: everything is so dependent on everything else that it is impossible to isolate a single few lines of program and say “these are the Spear of Destiny” or “these are the Sword of Truth.” Those same lines that “define” the Spear of Destiny also partly define the Sword of Truth—if the spear did not exist, the sword’s influence on the virtual world would be ever so slightly different. The code is the DNA of the virtual world¹⁷⁰

Thus, for my purposes, I analogize to virtual worlds, not to the real world, although they are filled with landscapes and one moves around in them (more or less) the way one moves in the real world. They are more like a collective work of art—a living painting, a communal symphony, or a continuously improvised play. I will return to this last analogy when explaining why the concept of imputed income means that in-world transactions in both WoW and SL are not and should not be reached by § 61. But we must first look at the cash-out rule and then consider the application of the priceless and realization exceptions to in-world activity.

A. TAXING RMT (THE CASH OUT RULE)

When a WoW or SL player receives US\$ for “selling” either a player account or an in-world item on an auction site, the sale produces gross income, regardless of who wins the current legal battles over who has what property rights in virtual items used in-world.¹⁷¹ If the player has no property rights, the sale is the sale of services. In exchange for US\$, one party agrees to help another party advance in the game by meeting in-world and transferring a game object that will enhance game play. Similarly a player might pay another to “level up” a character. Both transactions are for services; they are no different than a bridge player paying a “ringer” to play in a tournament. If the non-tax law concludes that a virtual item is “property,” then that item’s sale is subject to the formula in § 1001. The contract for sale will be similar to any other

169. See Joshua A.T. Fairfield, *Virtual Property*, 85 B.U. L. REV. 1047, 1053–56 (2005).

170. Richard A. Bartle, *Virtual Worldliness: What the Imaginary Asks of the Real*, 49 N.Y.L. SCH. L. REV. 19, 35–36 (2004).

171. As I discuss below in Part III(B)(2)(a), legal scholars have engaged in a robust debate over the extent to which property rules govern the relations between the owners of online gaming sites and the owners of online gaming accounts (i.e. players) as to virtual items created or used by players in the game.

contract for sale of an item of property, such as a house. The deal will “close” when the property is transferred in-world. To avoid the entire amount realized being included in gross income, the seller will need to establish a basis in the item transferred. Either way, however, the transaction produces gross income within the meaning of § 61.

Many players of the more structured games dislike RMT, as do the game developers. To combat RMT, the WoW gaming software now simply does not permit in-world transfers of many valuable items of loot between players. The game owners have changed the architecture of the game to prevent transfers, which makes it impossible to “close” an RMT for certain items.¹⁷² In WoW parlance, the item is “soulbound” to the avatar. While that makes the item unavailable for an RMT, it also reduces the item’s utility, since it cannot be traded for in-world goods or services and trade is an essential component of gameplay. However, it can still be sold to an NPC merchant and reduced to gold, the WoW unit of exchange. And RMT of gold is robust. Similarly, WoW players can still sell their characters, which involves selling the player account by selling the password and allowing the new owner of the account to change the owner profile.

Games similar to WoW have approached the RMT issue differently. Sony has created an in-world auction site that allows RMT for its game “Everquest II.” Players can either trade or buy items from each other (and from Sony) by using their choice of in-world currency (called “Platinum”) or US\$. To the extent that § 61 applies to RMT, it makes no difference whether the auction site is run by the game owner or a third party. When US\$ are received in exchange for an in-world item or a promise to transfer an in-world item, the transaction is about as clear a realized accession to wealth as one can imagine. It is a plain vanilla taxable transaction.¹⁷³

WoW players might object and argue that RMT should not be taxable because the activity is not permitted by the End User License Agreement (EULA). SL players do not have that argument because RMT is permitted, even encouraged, by their TOS. The argument had some traction under the Supreme Court’s reasoning in *Commissioner v. Wilcox* where the Court held that an embezzler did not have to report

172. James Grimmelmann, Note, *Regulation by Software*, 114 Yale L.J. 1719, 1751–52 (2005).

173. Similarly, when real world services are provided in exchange for a virtual item, it is a cash out transaction. For example, the following offer posted on craigslist on April 8, 2007, would constitute a taxable RMT transaction: “Hello I need 5000 world of gold for my epic flying mount. In return you can mount me.” Best of Craigslist: An EPIC Mount!, <http://www.craigslist.org/about/best/nyc/308349637.html> (last visited Oct. 31, 2007). An “epic flying mount” is a rare item in WoW that is useable only by high level players. Apparently, the offer was accepted and the transaction closed the next day. See Posting of auxiliary to <http://forums.clubsi.com/ubbthreads.php/ubb/showflat/Number/1245680/page/1/fpart/1> (Apr. 11, 2007, 12:30 EST).

embezzled income because he was under a legal duty to return the stolen funds.¹⁷⁴ But the Court overruled *Wilcox* in *James v. United States*.¹⁷⁵ Since then, the reach of § 61 does not depend on whether a realized accession to wealth is moral, immoral, legal, or illegal.

[T]he federal income tax is a tax on net income, not a sanction against wrongdoing. That principle has been firmly imbedded in the tax statute from the beginning. One familiar facet of the principle is the truism that the statute does not concern itself with the lawfulness of the income that it taxes.¹⁷⁶

Both WoW and SL players might claim (the latter with less credulity) that they do not “intend” to make money, or that their RMT results not in income but just in less costly game play. The reach of § 61 does not depend on intent. It depends on whether the taxpayer has a clearly realized accession to wealth, regardless of its form as cash, property, or services. A taxpayer who picks up a penny on the street does not “intend” it to be a rare 1922 double dime, worth \$5,000. But if that turns out to be the case, \$5,000 is the reportable income nonetheless.¹⁷⁷ Nor does § 61 depend on what expenses were incurred to produce the income. That is a matter of determining the proper deduction from gross income to arrive, ultimately, at taxable income. It is not an argument against inclusion in the first place, as many gamblers learn to their dismay.¹⁷⁸

B. TAXING IN-WORLD TRANSACTIONS

The gimlet eye of the tax collector looks at World of Warcraft and sees taxpayers playing for prizes and awards.¹⁷⁹ He looks at trades in Second Life and sees barter clubs. I will first set up a typical example of an in-world transaction in WoW and then one in SL before assessing the accuracy of the tax collector’s vision.

Assume a WoW player—call him Leeroy—is a Level 70 Paladin and

174. 327 U.S. 404, 409 (1946).

175. 366 U.S. 213, 222 (1961).

176. *Comm’r v. Tellier*, 383 U.S. 687, 691 (1966) (allowing a securities dealer convicted of crimes relating to his business to deduct the expenses of the criminal defense).

177. *Treas. Reg. § 1.61-14* (as amended in 1993).

178. *See, e.g., Mack v. Comm’r*, 429 F.2d 182, 184 (6th Cir. 1970). *See generally* Scott R. Fouch, *Recreational Gamblers: Gambling Once Too Often?*, TAX NOTES TODAY, Dec. 7, 2004, available at LEXIS, 2004 TNT 235-43.

179. Prizes are gross income under § 61 courtesy of the specific language in § 74 which provides that the term “gross income” includes “amounts received as prizes.” Its regulations clarify that “prizes” can be in the form of cash, property, or services. *Treas. Reg. § 1.74-1* (as amended in 1986). If the prize is property or services, the income to be reported is the fair market value of the property or services. So if a player on *Jeopardy* wins \$25,000, the player must report that amount as gross income. If a player on *The Price Is Right* wins a car that regularly sells for \$25,000, then that is the amount the player must report as gross income. *Whitten v. Comm’r*, 70 T.C.M. (CCH) 1064 (1995) (finding the taxpayer’s prize of 1991 Chevy Geo Tracker on *Wheel of Fortune* resulted in gross income of \$19,830.)

completes a quest with his Guild. As loot he picks up (a) the rare and powerful Gladiator Slicer Sword (which compares favorably to the fabled “Sword of a Thousand Truths”), and (b) the very useful Beast Lord Helm.¹⁸⁰ Assume the Gladiator Sword trades for G\$150 and the Beast Lord Helm trades for G\$100.¹⁸¹ Once he “picks up” those items, WoW credits his account with them and he is free to use them. Assume further that Leeroy can sell some of his old equipment now that he has acquired these fine items. So he sells the lower rated Bloodforged Shield for G\$6 and his old Arbiter’s Blade for G\$19.¹⁸² Assume that on Leeroy’s server (Argent Dawn) G\$ trades at US\$20 for G\$100 (in other words, each G\$ is worth twenty cents). By successfully completing the quest, Leeroy has increased his wealth by a total of G\$250, or US\$50, the value of the items he has acquired. Additionally, he has increased his wealth by G\$25, the amount he received in trade for the two items he sold, or US\$5.¹⁸³ Whether these prizes are received for besting other players under the rules of engagement in *Jeopardy* or for besting WoW NPCs under its considerably more complex rules of engagement is of no consequence to the Tax Code: if what Leeroy received represents a clearly realized accession to wealth—either in the form of cash property, or service, it’s income . . . unless, of course, it is either explicitly excluded by another statute or falls within one of the three great exceptions to the reach of § 61.

Assume a Second Life account owner—call her Zelda—designs and sells virtual clothing for SL “residents” (they do not like to be called “players”). In one particular transaction she has designed and created (through manipulation of “prims”) a wedding gown which she sells to another account owner’s avatar in exchange for L\$1,500. Assume further that L\$ currently trade for L\$250 to the US\$. After the transaction, Zelda has increased her wealth by a gross amount of US\$6 . . . unless, of course, it is either explicitly excluded by another statute or falls within one of the three great exceptions to the reach of § 61.

180. The “Sword of a Thousand Truths” appears in *South Park: Make Love Not Warcraft* (Comedy Central television broadcast Oct. 4, 2006).

181. For information on the Gladiator sword see Allakhazam.com: Gladiator’s Slicer, <http://wow.allakhazam.com/item.html?witem=28295> (last visited Oct. 31, 2007). For information about the Beast Lord Helm see Allakhazam.com: Beast Lord Helm, <http://wow.allakhazam.com/item.html?witem=28275> (last visited Oct. 31, 2007).

182. For information on the Arbiter’s Blade see Allakhazam.com: Arbiter’s Blade, <http://wow.allakhazam.com/item.html?witem=11784> (last visited Oct. 31, 2007). For the Bloodforged Shield, see Allakhazam.com: Bloodforged Shield, <http://wow.allakhazam.com/item.html?witem=14954> (last visited Oct. 31, 2007).

183. Part of the calculation will depend on the game rules. Some games have an item limit and so to accept the new items into inventory, Leeroy might have to delete two other items. In that case, his wealth increases only by the difference between the new and old times.

I. Priceless

Leeroy cannot avail himself of the priceless exception. Leeroy can convert both items into US\$, either directly (on third party auction sites) or indirectly (by selling in-world for G\$ which he can then sell for US\$). Even if there is no player-to-player market, Leeroy can *always* sell to an NPC and then cash out the G\$. Accordingly, Leeroy has no argument that his activity is “priceless.” Since every item can be converted into gold and gold can be converted into US\$ the calculation is simple. It’s administrable.¹⁸⁴ That is what makes the case for taxation strong. Both the Gladiator Sword and Beast Lord Helm have a readily ascertainable fair market value.

Zelda has an even less plausible claim that the receipt of L\$1,500 is “priceless.” Not only are L\$ actually traded for US\$ but those transactions are supported and encouraged by the game owners. In sharp distinction to Blizzard, Inc. (the owner of World of Warcraft), Linden Lab runs an auction site in-world, in which residents can freely trade any virtual item for either L\$ or for US\$ and can exchange the virtual currency for US\$. It would not be surprising to eventually see a Thomas Cook currency exchange next to the H&R Block shop in Second Life.¹⁸⁵

2. Realization

Leeroy has a stronger argument that he has not *realized* any wealth from the prize drop. He can approach this issue in two ways. First, he would argue that he has not actually or constructively received any cash, property, or services when the Gladiator Sword and Beast Lord Helm are credited to his account because his ability to convert them to usable wealth is too remote and contingent on factors beyond his control. Second, he would argue that the Sword and Helm cannot be severed from his player account and so, like Mrs. Macomber, all he has is a paper gain in wealth.

The strength of these realization arguments depends on the nature of Leeroy’s rights in virtual items such as swords and helmets or G\$. Fewer rights give him a stronger tax argument; more property rights weaken this realization argument. I will first give a short review of the property rights debate. I will then assess Leeroy’s realization argument assuming more or less robust property rights in virtual items. I will conclude with a brief analysis of Zelda’s realization arguments for Second Life transaction, but by that time I believe the reader will have

184. Further, since the computer has already tracked the transactions in order to put them into Leeroy’s inventory, it is not a huge technological problem to track trades or changes in inventory over time. A full discussion of those issues, however, is beyond the scope of this paper. The important point here is that the items themselves have a readily ascertainable fair market value.

185. See *H&R Block Gets a “Second Life,”* WEBCPA, Mar. 16, 2007, <http://www.webcpa.com/article.cfm?articleid=23653&pg=newsarticles>.

little need of much elaboration.

a. The Cyberproperty Debate

Beginning in the early 1990s non-tax legal scholars began publishing their thoughts on the interplay between various areas of law and human activity in the virtual world of the Internet.¹⁸⁶ Scholarship on “cyberlaw” burgeoned in the late 1990s, after the World Wide Web had firmly established itself as “the” Internet and only those with graying or diminishing hair remembered the days of BBS (Bulletin Board Systems) and dial-up, the ways of Prodigy and Compuserve.¹⁸⁷

As more academics focus more attention on the MMORPG phenomenon, they have addressed both the general question of how law governs the relationship between players and MMORPG owners, and the specific question of whether law provides property rights to players in virtual worlds regardless of the provisions contained in the EULAs.¹⁸⁸

In a thoughtful and provocative article, Professor Joshua Fairfield makes a strong claim for player ownership of virtual items. He argues that “computer code that is designed to act like real world property [should] be regulated and protected like real world property.”¹⁸⁹ By that he means that:

If I own a building in a virtual world, I own it regardless of the intellectual property inherent in the underlying code. I own it regardless of the physical chattel used by another person to experience it. I own it, control it, can invite people to be in it, hold meetings in it, work there, invest in it, and sell it to other people who might want to do the same.¹⁹⁰

Professor Fairfield explains why courts should uphold such rights in virtual property regardless of any contrary provisions in a EULA, using the WoW TOS as his prime example.¹⁹¹ In contrast to Professor Fairfield, other scholars advocate using property rules to protect game developers

186. See, e.g., Henry H. Perritt, Jr., *Tort Liability, the First Amendment, and Equal Access to Electronic Networks*, 5 HARV. J.L. & TECH. 65, 66 (1992) (discussing potential application of common carrier regulation under statute and common law to mediate disputes about access rights of users to Internet and tort liabilities of Internet providers for information contained in e-mail or electronic publishing).

187. The first major book was LAWRENCE LESSIG, *CODE AND OTHER LAWS OF CYBERSPACE* (1999). For a prior comprehensive article, see David R. Johnson & David Post, *Law and Borders—The Rise of Law in Cyberspace*, 48 STAN L. REV. 1367, 1401 (1996) (arguing for creation of separate body of law to regulate online interactions).

188. See, e.g., Woodrow Barfield, *Intellectual Property Rights in Virtual Environments: Considering the Rights of Owners, Programmers, and Virtual Avatars*, 39 AKRON L. REV. 649 (2006); Joseph J. Beard, *Clones, Bones, and Twilight Zones: Protecting the Digital Persona of the Quick, the Dead and the Imaginary*, 16 BERKELEY TECH. L.J. 1165, 1271 (2001); Fairfield, *supra* note 169, at 1047, 1082–84; Lastowka & Hunter, *supra* note 3, at 72–73.

189. Fairfield, *supra* note 169, at 1048.

190. *Id.* at 1078.

191. *Id.* at 1082–84.

and those who own the physical hardware that house the software.¹⁹²

The academic debate often centers on the role of the EULA. As Part I explained, Leeroy may play WoW only after agreeing to a contract, called either an EULA or a TOS. Blizzard, Inc., the owner of WoW, uses both documents. By their terms, they deny Leeroy any rights to any virtual item other than game play rights. For example, Leeroy agrees to waive any protections given him by copyright law to any content he might create while playing the game. As I read Professor Fairfield, he would find the WoW EULA to violate public policy and so not allow the EULA to withstand the protections Leeroy might otherwise claim under federal copyright law.¹⁹³

EULAs arose out of the uncertainty about whether software developers were adequately protected by copyright law.¹⁹⁴ Rather than selling their software outright, software developers turned to the legal device of a license as the mechanism to distribute their work. This often raised an issue of whether the license was a true license or a disguised sale. If it was a sale, the first sale doctrine would apply and developers would lose control over further distribution.¹⁹⁵

The argument for disregarding EULAs rests, in large part, on the claim that they are sufficiently close to contracts of adhesion that courts should disregard their terms on public policy grounds.¹⁹⁶ It is true that EULAs are sometimes found to be invalid contracts, particularly EULAs that come physically bundled in the shrinkwrap so that the purchaser cannot even tell what the terms are before making the purchase.¹⁹⁷ But

192. See, e.g., Patricia L. Bellia, *Defending Cyberproperty*, 79 N.Y.U. L. REV. 2164, 2166 (2004) (framing the question as “[w]hen can the owner of a computer system connected to the Internet assert a right to ‘exclude’ unwanted uses of her system?”).

193. See Fairfield, *supra* note 169, at 1083–84 (“These provisions [in the WoW EULA] surpass the usual abuses of contracts of adhesion. . . . [P]roperty law provides a rationale and a mechanism for resisting the systematic expropriation of emergent online property forms by use of contract.”). Since the Second Life Terms of Service grant far more rights to players, I do not consider it here.

194. The first sale doctrine is about control. For example, a book is a copy of a writer’s authorship. Sale of the book is different than sale of the copyright in the book. While 17 U.S.C. § 106 (2000) gives the copyright owner the exclusive right to distribute copies, 17 U.S.C. § 109(a) (2000) limits that right to the “first sale” of any given copy of the work. See *Bobbs-Merrill Co. v. Straus*, 210 U.S. 339, 350–51 (1908). After that, the owner of the copy has the right to dispose of his or her copy of the work. If the user of software thus purchased only a license right, the user could be prevented from reselling the copy, at least in theory. Professor Leandra Lederman discusses how this distinction might apply to virtual world EULAs in *Stranger than Fiction: Taxing Virtual Worlds*, 82 N.Y.U. L. REV. (forthcoming 2007), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=969984.

195. Compare *SoftMan Products Co. v. Adobe Sys., Inc.*, 171 F. Supp. 2d 1075, 1087, 1094 (C.D. Cal. 2001) (finding transaction to be sale, not license, and so refusing to grant Adobe a preliminary injunction to enjoin SoftMan from re-selling unbundled Adobe software programs), with *Davidson & Assocs., Inc. v. Internet Gateway*, 334 F. Supp. 2d 1164, 1178 (E.D. Mo. 2004) (finding that EULA used by Blizzard Entertainment, developer of World of Warcraft, for Battle.net was true license).

196. See Fairfield, *supra* note 169, at 1082–84.

197. *Meridian Project Sys., Inc. v. Hardin Constr. Co.*, 426 F. Supp. 2d 1101, 1106–07 (E.D. Cal.

when such shrinkwrap EULAs give the user the right to return the software after purchase, then the user's choice to use the software instead of return constitutes a binding assent and the contract is good.¹⁹⁸ And a EULA which gives the user the ability to accept or reject the terms of the license by clicking through the license presented on the screen to the program beyond is going to be valid for that reason (adequate disclosure and explicit assent), unless it is a contract of adhesion.¹⁹⁹

The doctrinal details of what constitutes a contract of adhesion vary from state to state. For example, New Mexico uses this test: (1) the agreement must occur in the form of a standardized contract with boilerplate clauses prepared entirely by one party to the transaction; (2) the party who prepared the contract must be in a superior bargaining position such that the weaker party has no realistic alternative to doing business with the stronger party; and (3) the contract must be offered on a take-it-or-leave-it basis with no opportunity for the weaker party to even attempt to bargain.²⁰⁰ New York uses a slightly different test: adhesion is found when the party seeking to enforce the contract (1) uses high pressure tactics or deceptive language in the contract; (2) there is inequality of bargaining power between the parties; and (3) where the contract inflicts substantive unfairness on the weaker party.²⁰¹ Common to all adhesion tests, however, is the idea that the weaker party has no realistic alternative to agreeing to the contract offered.

The EULAs do not appear to be contracts of adhesion under any state law test because players have realistic alternatives. Even assuming that the contract is boilerplate, offered on a take-it-or-leave-it basis, and inflicts substantial unfairness to the player (in requiring the player to waive all copyrights, or arbitrate disputes, among other provisions), the player is not the weaker party; players have plenty of alternative choices. Players can play other structured games or participate in other virtual world environments. The market is full of a variety of games and the short history of virtual worlds shows how the player population on any given world expands and contracts, sometimes to the point that the virtual world dies.²⁰² Yes, virtual worlds can die.²⁰³ Players rarely choose

2005) (discussing copyright law idea/expression dichotomy, in context of deciding whether end user's copying of software help files infringed copyright, and collecting cases on validity of EULAs as licenses).

198. *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1452 (7th Cir. 1996).

199. Robert W. Gomulkiewicz, *Getting Serious About User-Friendly Mass Market Licensing for Software*, 12 GEO. MASON L. REV. 687, 691-92 (2004).

200. *Guthmann v. LaVida Llana*, 709 P.2d 675, 678 (N.M. 1985).

201. *In re Arbitration of Ball*, 665 N.Y.S.2d 444, 446 (N.Y. App. Div. 1997).

202. Bruce Sterling Woodcock gives a good history of these population shifts. See *Mmorgchart.com*, <http://www.mmorgchart.com> (last visited Oct. 31, 2007).

203. See Clive Thompson, *Not With a Bang, but a Whimper*, WIRED, Dec. 15, 2005,

what games to play—whether structured or unstructured—based on the contract terms of the EULA; the choice instead turns on how good the game play is in the virtual world offered to them.²⁰⁴

In a recent decision, federal district court Judge Robreno held that Linden Lab's arbitration clause in its TOS was invalid because the TOS was a contract of adhesion.²⁰⁵ This is the first court decision addressing what has, until now, been an academic debate. A review of the court's opinion, however, discloses some rather peculiar analysis.

Mr. Bragg sued Linden for damages related to a land deal in SL. Mr. Bragg had taken advantage of a glitch in the operating system to purchase virtual land at auction for a far lower price than the game developers intended and then resold at a huge markup.²⁰⁶ When Linden discovered the deals, it exercised its God-like powers to unwind the deal and then shut down Mr. Bragg's account, in which he had invested a considerable amount of US\$.²⁰⁷ Mr. Bragg's claim for damages depends on whether he had rights in the virtual land independent of the SL TOS.²⁰⁸

Judge Robreno's opinion is on a preliminary procedural point: the validity of a mandatory arbitration clause in the TOS. That is, the TOS required Mr. Bragg to arbitrate his claim in San Francisco. Mr. Bragg instead wanted to sue in Pennsylvania, where he lived.²⁰⁹ Judge Robreno decided that that arbitration clause was inoperative because the TOS was a contract of adhesion.²¹⁰

The district court's adhesion analysis is circular. Consistent with most state law concepts of adhesion, the analysis turns on whether Mr. Bragg had "reasonably available market alternatives."²¹¹ The court decided that Mr. Bragg had no reasonable alternatives because "[SL] was the first and only virtual world to specifically grant its participants property rights in virtual land."²¹² Therefore, Mr. Bragg had no other gaming choices. This reasoning assumes its conclusion. The entire

<http://www.wired.com/gaming/gamingreviews/commentary/games/2005/12/69848>.

204. This can be seen in any number of blogs on the subject. For example, at the Terra Nova blog the commentators routinely discuss new games and who is playing what and why. Rarely, if ever, do any of the commentators note a refusal to play a game based on the EULA or TOS. What is notable about this silence is that most of the commentators on Terra Nova are highly educated professionals—lawyers, game developers, academicians—who discuss an impressive array of subjects (including taxation of virtual worlds) with sophistication and insight. Yet none have been prompted to write about any refusal to play a game because of the EULA or TOS.

205. *Bragg v. Linden Research, Inc.*, 487 F. Supp. 2d 593, 606–11 (E.D. Pa. 2007).

206. *Id.* at 597.

207. *Id.*

208. *Id.* at 595.

209. *Id.* at 597.

210. *Id.* at 606.

211. *Id.*

212. *Id.*

substantive legal question is whether Mr. Bragg indeed has property rights in virtual land independent of the TOS. Deciding that the TOS was a contract of adhesion because Linden *did* as a matter of law grant residents “property rights” in virtual land, assumes the answer to the substantive legal question.²¹³

Worse, the court’s adhesion analysis proves too much by reducing the “relevant market” to a set of one. Logically, the court’s analysis would find that Hertz’s form rental contract fails the “reasonable alternative market” test because Hertz is the only rental car agency that offers Toyotas, or some other car. Under the court’s analysis, every EULA and TOS fails the reasonable alternative market test because every game world offers *something* unique. In other words, the court is here narrowing the scope of the “relevant” market to a set of one. That cuts against common sense.

To say that EULAs are valid, however, is not to say that *all* their terms will be upheld in a dispute. For example, it is standard contract law that ambiguities in the EULA will generally be construed against the game developer since they are boilerplate.²¹⁴ However, it seems quite unlikely that federal copyright law will preempt the terms of a valid EULA, because “the fact that parties bargained privately to achieve mutual assent” will likely suffice as the needed “extra element” beyond the federal protections to prevent statutory preemption.²¹⁵

b. Analysis of Realization Argument

The survival of the EULA as a valid contract may have important implications for the tax analysis. Contracts themselves are a species of property called a “chose in action.” A “chose” is just another word for thing and “in action” just means the opposite of in possession. A chose in action is a species of intangible personalty that can be owned and transferred. Generally it is “[t]he right to bring an action to recover a

213. Because the parties later settled the case, Judge Robreno never got the chance to apply basic property law doctrine on sale of realty at auction to the events to see whether Linden breached a duty towards Mr. Bragg.

214. Erez Reuveni, *On Virtual Worlds: Copyright and Contract Law at the Dawn of the Virtual Age*, 82 IND. L.J. 261, 290 (2007) (“[J]udicial construction of EULAs tends to follow the same analysis as other standard form contract cases . . .”). Mr. Reuveni’s very nice article reviews how various contract law doctrines, including those in the UCC and the Restatement, and public policy may not invalidate EULAs but may rather affect specific terms in the EULA. *Id.* at 297–303.

215. *Id.* at 292–94. Although beyond the scope of this Article, I note a small apparent inconsistency in Mr. Reuveni’s otherwise excellent article. While his later analysis suggests that federal copyright law will not preempt EULAs, in an earlier section he suggests that “literary works created within the game space” would receive copyright protections. *Id.* at 284. For example, if our WoW player Leeroy wrote a fight song for his Guild, Mr. Reuveni apparently believes copyright law would extend the usual copy rights to Leeroy, despite a waiver provision in the WoW EULA. I am not clear on how Mr. Reuveni reaches this conclusion. He analogizes to the player composing poetry on Word, but the Word TOS does not ask users to waive copyrights, and Mr. Reuveni provides no other reasoning or authority.

debt, money, or thing.”²¹⁶ State laws give the specifics. For example, under Indiana law a chose in action is “a personal right not reduced into possession but recoverable by suit in law. It is a property right characterized as personalty. The term in its broadest sense encompasses all rights of action whether they sound in contract or tort.”²¹⁷

For example, my car is my “chose” and I have “possession” of it when I’m driving it. But if I lease you my car, you get possession during the lease term and I have a right to get the car back at the end of the lease term. That contract right is the chose in action. I have traded my possession of the thing for an action at law for its recovery (or damages or whatever). I can sell my right to sue you.²¹⁸ Or a creditor can seize it.²¹⁹ Or it could become part of my bankruptcy estate if I file bankruptcy.²²⁰ Or if I die, that chose in action becomes part of my taxable estate.²²¹

To the extent that courts uphold EULAs, players still do own property: their player account. It is a chose in action. As with any other type of property, a player’s account may be more or less valuable. WoW players routinely sell their accounts for US\$, with the price depending on how many avatars of what power and with what virtual items the account contains.²²² Once one views the player account as the relevant property interest “owned” by the player, then the realization argument provides a potentially strong argument against taxation.

Consider first WoW. If EULAs are the source of our player Leeroy’s rights, then he has good arguments as to why he has not realized income within the meaning of § 61 when he picks up the Gladiator’s Slicer and the Beast Lord Helm. First, he would point to the doctrine of constructive receipt, which provides one test for realization: “Income although not actually reduced to a taxpayer’s possession is

216. BLACK’S LAW DICTIONARY 234 (7th ed. 1999); *see also* *Sheldon v. Sill*, 49 U.S. 622, 630 (1850) (“The term chose in action is one of comprehensive import. It includes the infinite variety of contracts, covenants, and promises, which confer on one party a right to recover a personal chattel or a sum of money from another by action.”).

217. *Neffle v. Neffle*, 483 N.E.2d 767, 771 (Ind. Ct. App. 1983) (citations omitted).

218. *Augusta Med. Complex v. Blue Cross of Kan., Inc.*, 634 P.2d 1123, 1125 (Kan. 1981) (“Free assignment of choses in action is considered to be a matter of public policy.”).

219. *See, e.g., Yazoo & Miss. Valley R.R. v. City of Clarksdale*, 257 U.S. 10, 22 (1921) (holding that Mississippi law had changed common law so as to allow stock certificate [a chose in action] to be seized and sold in the same manner as chattel).

220. 11 U.S.C. § 541(a)(1) (2000) (providing that property of the bankruptcy estate includes “all legal or equitable interests of the debtor in property as of the commencement of the case”); *Cable v. Ivy Tech State Coll.*, 200 F.3d 467, 472–73 (7th Cir. 1999) (stating that § 541’s language “includes choses in action and other legal claims that could be prosecuted for benefit of the estate”).

221. *Blodgett v. Silberman*, 277 U.S. 1, 12 (1928) (finding that decedent’s partnership rights in a New York partnership were a chose in action and, as such, Connecticut could tax the passage of decedent’s chose in action even though partnership was outside of Connecticut).

222. IGE, The Leading MMORPG Services Company, <http://www.ige.com> (last visited Oct. 31, 2007).

constructively received by him in the taxable year during which it is credited to his account, set apart for him, or otherwise made available so that he may draw upon it at any time”²²³ Recall that income can be in any form: cash, property, services. So if “property” is credited to Leeroy’s player account, or set aside for him, or otherwise made available to him so that he may draw upon it at any time, that credit will constitute income within the meaning of § 61. Leeroy’s argument rests on the corollary, also expressed in the regulation: “However, income is not constructively received if the taxpayer’s control of its receipt is subject to substantial limitations or restrictions.”²²⁴ Leeroy will argue that because his use of the virtual items, including use of the G\$, is so severely limited by the EULA, he has not received any prize or award unless he engages in another transaction that “locks in” the gain, such as cashing out through RMT. The WoW EULA is a substantial restriction to his accession to wealth because the EULA specifically forbids Leeroy from selling his account or the virtual items.

The importance of the EULA here is that it creates a *legal* restriction on Leeroy. Courts have held that certain contractual restrictions may operate to prevent income from being constructively realized.²²⁵ While the computer software will prevent Leeroy from transferring rares like the Chalice to another player in-world, such *practical* difficulties are not relevant to the constructive receipt analysis. The cases interpreting the “substantial restriction” language of the regulation hold that it refers to substantial *legal* restrictions, not practical ones.²²⁶

Although the substantial restriction argument is strong, I doubt it is ultimately a winner. First, the analogy to a deferred payment provision is imperfect. The EULA is not a deferred payment contract because

223. Treas. Reg. § 1.451-2(a) (as amended in 1979). This language would arguably give Leeroy a peg on which to argue that the interstitial winnings are not income to him until actually cashed out because it would cost him \$1.75 to extract each amount below P\$10.00 (per TOS § 2.16). Since, according to the PLR’s analysis, each P\$6.00 credited to his account for a win represents a return of his \$2.50 capital and income of \$3.50, then, in the scenario posited in the text, he is never winning more than P\$10.00 at one time.

224. *Id.*

225. See, e.g., *Robinson v. Comm’r*, 44 T.C. 20, 36 (1965) (upholding boxer Sugar Ray Robinson’s use of “deferred payment” contracts to spread income from a fight into subsequent tax years); Rev. Rul. 60-31, 1960-1 C.B. 164 (implying that deferred payment contracts are valid even if payor was willing and able to sign a contract calling for immediate payment). Note that a legal restriction against RMT does not prevent an RMT from being a realization event.

226. See, e.g., *Loose v. United States*, 74 F.2d 147, 150 (8th Cir. 1934) (holding taxpayer constructively received income from matured interest coupons even though stroke prevented taxpayer from traveling from California to New York to retrieve and cash the coupons); *Hornung v. Comm’r*, 47 T.C. 428, 435 (1967) (holding taxpayer’s physical inability to retrieve prize car located in New York when awarded the car on December 31 was not relevant to Court’s analysis; instead taxpayer did not constructively receive the prize because “nothing was given or presented to petitioner to evidence his ownership or right to possession of the car at that time”).

Leeroy gets the loot immediately. Thus, the restrictions in the EULA are better viewed as affecting the *amount* of income Leeroy realizes from the prize rather than the *timing* of his realization. Once credited to his account, Leeroy has full use of the virtual items, at least so far as the architecture of the game permits. The key to constructive receipt is whether the taxpayer had “essentially unfettered control over the date of actual receipt.”²²⁷ Permission to *use* is what makes the items valuable, not just permission to sell. Use is almost as big a stick in the bundle of property rights as is alienability.²²⁸ Even if the use is restricted to the confines of the game, the coding restrictions just affect value, not realization.

Second, even deferred payment provisions will be ignored if they are either (a) sham provisions or (b) honored in the breach rather than in the execution. WoW virtual items are routinely traded in RMT on third party sides such as www.IGE.com. Even if Blizzard routinely enforces the EULA prohibition, the weed-like growth of RMT suggests that the contractual provisions do not operate as a true restriction on Leeroy’s ability to convert virtual items to US\$.²²⁹

Leeroy’s second argument against realization is that his receipt of the Sword and the Helm is just like Mrs. Macomber’s receipt of a stock dividend. They represent mere appreciation of his chose in action, his player account. His legal position vis-à-vis the player account—what he would analogize to his stock ownership—has not changed at all and, hence, there is no event, no market transaction, to peg the gain. This is an initially attractive argument, particularly if the EULA provisions and the game software together make it difficult, if not impossible, for Leeroy to extract any value from the virtual items without selling them as part and parcel of his player account. Focusing on the player account as the relevant property interest, the prizes look like mere paper gains to the value of the account.

The weakness in this second argument is that the *Macomber* line is a narrow one indeed.²³⁰ Particularly after *Cottage Savings Ass’n*, the

227. See *Hornung*, 47 T.C. at 434–35.

228. *United States v. Craft*, 535 U.S. 274, 283 (2002) (describing “use” rights as one of the most essential of property rights).

229. One cannot overstate the robustness of RMT. The best efforts of Blizzard show that resistance is futile. Players even work around the coding restrictions for “soulbound” items. Even if Leeroy cannot transfer the Slicer because it is soulbound, he knows where to find it (that is, where beastie drops it). In such situations, players will sell their services to kill a beast and let the buyer pick up the dropped item. For these same reasons, I do not give much weight to an argument that the value of Leeroy’s rights in the Slicer and Helm are so contingent on future conditions and circumstances that such value cannot reasonably be ascertained. There is just too much RMT. For further explanation of this idea and other ideas Leeroy might use, see Joseph M. Dodge, *The Story of Glenshaw Glass: Towards a Modern Concept of Gross Income*, in *TAX STORIES* 15, 44–51 (Paul L. Caron, ed., 2003).

230. See Kornhauser, *supra* note 114, at 185–86 (reviewing post-*Macomber* realization cases

realization test is simply a search for a change in legal relations, regardless of economic substance. Any change in relations that puts both the taxpayer and the IRS “in a position to determine the change in the value” of the property in question will meet the realization requirement.²³¹ And here, as soon as the WoW program credits *Leeroy*’s account with the Sword and the Helm, that changes *Leeroy*’s legal relationships; unlike Mrs. Macomber, he now has legal rights (per the EULA) in these two items different than he had before and different from any other player. Also unlike Mrs. Macomber, the transaction did not simply split up the same pie into smaller pieces among the shareholders. Instead, *Leeroy* now has a different set of use rights than other players. His avatar is bigger, badder, better. Most importantly, this change is an easily discernable and tracked event that allows the IRS to determine the change in the value of his account. Again, because there is a readily ascertainable fair market value to the Sword and the Helm, the administrative concerns over delaying the accounting of this accession to wealth until another, better time are minimized.

Professor Lederman makes a nice analogy between in-game items and deck chairs on a cruise ship. So long as each player has similar use rights in the items traded, there is no realization event.²³² Similarly, she argues that two employees who swap different office equipment owned by their employer (a bookcase for a printer) do not “realize” any gain because all they have traded are use rights.²³³ That is all true, and is the intuitive case for realization. Even there, however, I believe the analogy does not quite track. Loot drops in WoW are not swaps, but prizes. They are more like the cruise ship giving a gift card good in the ship bookstore for the best limbo dancer. Further, the function of in-world currency as a medium of exchange might well make it qualitatively different than any other type of virtual item, so trades of items for currency might still trigger the *Cottage Savings Ass’n* trip-wire.

Ultimately, however, the Achilles heel to both of *Leeroy*’s realization arguments is the status of the EULA. To the extent that the

involving corporate reorganizations).

231. *Cottage Sav. Ass’n v. Comm’r*, 499 U.S. 554, 567 (1991).

232. Leandra Lederman, *supra* note 194 (manuscript at 40, on file with author) (“The reallocation of deck chairs by the vacationers is not a disposition of an interest in one deck chair and the acquisition of an interest in another. Rather, each vacationer has a right to use the chairs in the public areas of the cruise ship. Redistributing possession among those with the usage rights is not a disposition of property, even if some vacationers who sleep late pay cash to others vacationers who rose early and claimed all the chairs of the most popular type. The cash received by the early birds is gross income, but the receipt of cash by them does not make the exchange of the use of one chair for the use of another chair into a realization event.”(citation omitted)).

233. *Id.* (“The employee has not really disposed of any asset, much less received title to a different asset. Instead, what has occurred is a relocation of certain items owned by the employer within the domain controlled by the employer.”).

law gives Leeroy more and more property rights directly in each virtual item, separate and apart from the EULA provisions (or overriding the EULA provisions), then his receipt of the virtual Gladiator's Slicer looks more and more like the receipt of any other distinct item of real-world property. His claim of unrealized gain becomes less and less credible.

This Achilles heel becomes more evident when one looks at transactions that take place within Second Life. Zelda does not have to wait for courts to declare that federal copyright law preempts the TOS she agreed to. The SL TOS reserves all intellectual property rights to her. Accordingly, assuming her wedding gown design meets the standards for copyright protection, she has the right both to sell her wedding gown design and to sell the right to copy it.

Zelda might nonetheless argue that her exchange of a virtual wedding gown for L\$1,500 is not a realization event because, like every other player in every other virtual world, her putative accession to wealth is so contingent on factors out of her control that there is no certainty at all of her "locking in" her gain in wealth until she cashes out. All game developers are Gods. And like every other EULA, her agreement with SL gives the game owners the ultimate right to block her account, to unwind her transactions, to deprive her of all her L\$, or to make any one of hundreds of design decisions that may adversely affect her, from changing the landforms around her, to changing the "zoning" codes (such as by designating her "land" as player-to-player combat zone), to flooding the market with L\$ and so unleashing rampant inflation.²³⁴

Zelda's realization argument proves too much. After all, much the same can be said about First Life: our world is so contingent on factors out of our control that any seeming increase in individual wealth could be wiped out in an instant either by micro events (a falling piano) or macro events (a nuclear holocaust). This is not the kind of "substantial restriction" that prevents realization. Accordingly, as far as the realization requirement is concerned, Zelda's transactions look very much like the complex barter transaction between Lilly and Kunal with the L\$ serving the same function as trade credits which, in turn, serve the same function as currency: a repository for the value of the goods and services that can be purchased.²³⁵

In sum, while the realization argument is intuitively attractive in some respects, it does not hold up well, I think, to further scrutiny. I prefer to focus instead on the concept of imputed income. Not only do I

234. These possibilities are inherent in any virtual world. See Bartle, *supra* note 170, at 27–30 (discussing "evolution" within world and unexpected consequences of design changes). Even seemingly minor and benign changes can have unhappy results. It's the butterfly effect.

235. See generally Keller, *supra* note 119 (discussing the tax treatment of bartering through trade exchanges).

believe that analysis leads to the right result currently (no taxation) but it also gives a reasonable test for when the result should change from “no taxation” to “taxation.” The change should not be dependent on the formal legal category we assign “virtual items.” I suggest that the tax result should instead follow function, the function of virtual currency. That is, unless and until virtual currency becomes a true medium of exchange for goods and services provided in the corporeal world, the concerns about government over-reaching and intrusion implied by the imputed income doctrines should outweigh the attraction of taxing trackable transactions of objects that have a readily ascertainable fair market value. To that idea I now turn.

3. *Imputed Income: The Play Is the Thing*

I submit that using the concept of imputed income is the best way to frame the issue of taxing either the loot drop in WoW or the wedding dress transaction in SL. Neither Leeroy nor Zelda should have to report gross income from their in-world activities, even though they have engaged in identifiable transactions which indisputably increase their economic wealth and even if courts hold that they have rights in the virtual items independent of the EULAs. This is because their activities are not normal market transactions but represent self-provided services or, at most, enjoyment of self-owned property. The service provided is play and the property is a right to play, a chose-in-action, a thing.

Like any lawyer I am drawn towards terms of art and I so use the term “play.” By it I do not mean fun and games. My title’s reference to Shakespeare is not accidental. Virtual worlds provide a platform for role-play, a stage on which people can try on roles that are otherwise unavailable to them. Throughout our life journey we take on and discard various roles (child, parent, teacher, student, jackass, saint) that are integral to our existence and our self-conception of our existence. But the role-play available in virtual world is separated from that existence by what game theorists call a “magic circle” and what theater critics call “the fourth wall.”²³⁶ Both of these concepts get to the same idea: that at an agreed place, time, and in an agreed manner, we can act without consequence to our “other” life; we can separate what happens at the agreed place and time from the rest of our existence. Las Vegas has commercialized the idea as “what happens in Vegas, stays in Vegas.” Similarly, virtual worlds allow massive numbers of people to engage in role-play that many do not expect to carry over into their off-line

236. See Edward Castronova, *The Right to Play*, in *THE STATE OF PLAY: LAW, GAMES, AND VIRTUAL WORLDS* 68, 71–75 (Jack M. Balkin & Beth Simone Noveck eds., 2006) (describing game theory and consequences of “ambiguous gaming”); Fourth Wall—Wikipedia, The Free Encyclopedia, http://en.wikipedia.org/wiki/Fourth_wall (describing use and history of the term “fourth wall” in theater criticism) (last visited Oct. 31, 2007).

worlds.²³⁷

Both concepts, the “magic circle” and the “fourth wall” are themselves fictions, created and maintained by collective acts of will and not inherent in the human condition.²³⁸ Shakespeare explored the boundaries of the fourth wall with his “play within a play” device in *Hamlet* (to “catch the conscience of the King”),²³⁹ as have countless later playwrights, such as Thornton Wilder in “Our Town.”²⁴⁰ So do thousands of invisible hands push at the boundaries of virtual worlds as part of a general cultural commodification of human activity.²⁴¹ In short, some people want to role-play for non-monetary reasons; others want to make a buck. So long as the play is sealed off from the audience, Shylock should not have to pay tax on the shower of shekels, regardless of whether the actor *playing* Shylock “owns” the shekel-props or is just permitted to use them by the owner of the stage.

The intent of the taxpayer is irrelevant to the search for an administrable legal concept of gross income.²⁴² If I sell a Hank Aaron trading card I bought for \$1 for \$10, it does not matter whether I treat my baseball card collection as a game or a business. Either way, I have \$9 of gross income. So if in-world activity becomes taxable, it is taxable to all who engage in it, regardless of *why* they do so, whether for fun or profit.

It is the concept of imputed income that draws the proper line. Not

237. See, e.g., Seth Kugel, *A House That's Just Unreal*, N.Y. TIMES, Aug. 9, 2007, at D1 (exploring phenomena of online “marriages” between avatars played by people married to other people in the real world).

238. Just look at the red-faced little league parent screaming at the coach who does not play his or her child, or at the umpire who made the “wrong” call. Then look at the parent who explains to his or her crying child the true meaning of the cliché “it’s only a game.” Teaching children the difference between games and non-games is a part of their cultural education, as parents and schoolteachers well know. Children who fail to sufficiently internalize the fiction of games grow up to be the screamers.

239. WILLIAM SHAKESPEARE, *HAMLET* act 2, sc. 2.

240. See generally THORNTON WILDER, *OUR TOWN: A PLAY IN THREE ACTS* (Perennial 2003).

241. For a wonderful essay on this subject, see Mary Poovey, *For Everything Else, There's . . .*, 68 SOC. RES. 397, 399 (2001) (exploring how “within the modern social imaginary epitomized by the global system of finance capital, there is almost no limit to the logic that informs commodification. This logic provides the primary terms in which residents of the modern world imagine value, register sensations, and experience time and space”). For stories on the commodification of virtual worlds, see, e.g., Jessica Bennett & Malcom Beith, *Alternate Universe: Second Life is Emerging as a Powerful New Medium for Social Interactions of All Sorts, from Romance to Making Money. It May Be the Internet's Next Big Thing*, NEWSWEEK INT'L, July 30, 2007, <http://www.msnbc.msn.com/id/19876812/site/newsweek/page/0/>.

242. And, again just as with RMT, intent might be very important in determining whether appropriate deductions from income are allowed, as for example, under § 162 or § 212 or limited by § 183. But even here, it is not subjective intent so much as objective manifestations of intent. See, e.g., *Theisen v. Comm'r*, 74 T.C.M. (CCH) 1327, 1329 (1997) (finding that to avoid the § 183 restrictions on taking losses from an activity in excess of income generated by that same activity, “[t]axpayers need not have a reasonable expectation of profit. However, the facts and circumstances must demonstrate that they entered into the activity, or continued the activity, with the actual and honest objective of making a profit”) (citations omitted).

only does it properly disregard intent, it also properly disregards the *trompe l'oeil* feature of virtual worlds: the confusion between virtual representations of items and the items they represent. Just as a virtual spoon is not really a spoon, neither is the market where virtual spoons are traded really a market for goods and services. It's a play-market, the virtual items within it are play-things used to enhance the value of the play, and the virtual currency which is the medium of exchange is play-money.

A thought experiment will help illustrate. Suppose an organization buys a large field outside town and sets up a large walled compound it names World of Medieval Life. Within the compound is recreated a medieval village. People can come visit on weekends and pay US\$40 at the gate for a weekend pass. Once inside, people are given a sack of coins, called Dinars (D\$). Each sack contains one hundred Dinars. Additional sacks cost \$20. Once inside, folks are encouraged to make basic costumes from freely provided materials, and to use their Dinars to purchase accessories, various forms of entertainment (plays, comedy acts) and to enter contests. They may also wander around and purchase nothing. Nothing may leave the compound, however, nor may Dinars be converted back into Dollars upon exit. People who plan to come back can keep their stuff in a cardboard box. Neither food nor drink are allowed in the compound. People can instead eat at a nearby McDonald's (it does not take Dinars).

Assume Leeroy and Zelda visit. They each pay US\$40 and receive D\$100. After many weekends of visiting, Leeroy and Zelda get to know other regular visitors and they meet to play games, put on entertainments for each other, and picnic. Over time, Leeroy gets to be very, very good at jousting and wins various prizes, both in the form of accessories (a sword, a helmet) and in the form of D\$. Each time he wins he gets to stand on a podium and in a meaningful ceremony is handed a sack of D\$ or whatever is the prize *de jour*. Over time, Zelda gets good at making costumes—especially medieval wedding dresses—which she also trades for D\$ as well as swaps for accessories. Although it is against the rules, each weekend they sell a sack of D\$100 for US\$10 which they spend at the McDonald's.

Leeroy and Zelda eventually acquire thousands of D\$ over and above what they have received in exchange for each entrance fee. They are awarded the titles of Prince Leeroy and Princess Zelda by the other regulars. They are held in high esteem for their talents and virtues. They wear crowns. But they still have to pay the entrance fee to access World of Medieval Life each weekend. And their D\$ are no good except inside the compound. And their box of dress-ups and stuff must be kept inside the compound. And when they leave each Sunday afternoon, they change back into their civilian clothes. And on Monday morning Leeroy

goes back to shining shoes at the airport and Zelda puts on her security guard uniform.

Neither Leeroy nor Zelda have any gross income from the acquisition of Dinars or accessories. The items received from their barter activity are simply props, good only for their play within World of Medieval Life. The Dinars they receive from sales and as prizes are, literally, play money, representing only their flow of satisfactions arising out of their personal exertions. Thanks to Leeroy's jousting skills, Zelda's design skills, and both of their trading skills, they get a lot of play for their entrance fee. It's a bargain purchase. All the Dinars can "buy" is more play within the walls of World of Medieval Life—more joust entries, more accessories, more fun. Dinars represent stored "units of play."

But what about fair market value? Even if Dinars are not true currency, they are tangible personalty that are readily traded for dollars. You can touch and hold and hoard Dinars and sell a sack of them for US\$10. What keeps them from being income when received as a prize? The wall. Conversion to US\$ requires breach of the fourth wall. Until then, they represent in-kind benefits—play; it is economic wealth to be sure, but self-created. They are acquired through play-market transactions, not through true market transactions, at least so long as the "market" activities remain behind the fourth wall and within the magic circle.

The same operational problems that stay the hand of the government from taxing other imputed income (valuation and intrusion) should operate to keep tax administrators from entering World of Medieval Life. For if Dinars count, then everything that Dinars represent counts too and the government soon finds itself in the middle of trying to figure out the value of a wooden play sword.²⁴³ The intrusion required to police all taxpayers so that the honest ones are not suckers is staggering. It is a low yield, high cost game for the government, just like taxation of most other types of imputed income. There is time enough to tax Leeroy and Zelda when they cash out, when the magic circle is broken, the fourth wall breached. When they exchange Dinars for dollars, they have

243. This is perhaps the central intuition against taxation. See Andrew D. Schwarz & Robert Bullis, *Rivalrous Consumption and the Boundaries of Copyright Law: Intellectual Property Lessons From Online Games*, 10 INTELL. PROP. L. BULL. 13, 24 n.63 (2005) ("Where there is property, of course, there is usually taxation. The thought of teenage kids acquiring valuable digital swords and then facing the prospect of that acquisition being taxed as income is an undesirable outcome to many (including the authors). It would clearly be cumbersome and troubling if every 'dead spiderling' required an IRS Tax Form 1099."). As with many others, the economist Schwartz and the IP lawyer Bullis suggest that a cash-out rule is the appropriate one. They conclude, "[h]owever, not all property is taxed upon acquisition. One tax framework that may work well to alleviate such concerns is that of a manufactured good and/or a capital asset where taxation occurs only at the point of conversion of in-game goods to real-world assets." *Id.*

traded units of play for units of currency, and only then should the law impose upon them the duty to faithfully report and pay tax on those financial transactions as on any other.

Tax law has dealt with “units of play” before. Think casino chips. They have measurable fair market value and while courts recognize them as a “medium of exchange,” they are not viewed as cash equivalents in tax law.²⁴⁴ Instead, they are “merely representative of whatever had been given to acquire them” and that will be either cash or play (a successful bet).²⁴⁵ To the extent that a player wins chips over and above purchased chips, they represent the stored value of the taxpayer’s play, a self-provided service. Even though the self-provide service involved interaction with other players, that does not make it a true market transaction. This is an intuitive result to gamblers, who generally want to get as much “play” as possible for their buy-in. Neither the IRS nor any court has yet suggested that a taxpayer who spends US\$20 to buy twenty \$1 casino chips (C\$) and fifteen hours later cashes in C\$10 for US\$10 has gross income within the meaning of § 61, even though the taxpayer might have, interstitially, held more than C\$1,000 at some point during that fifteen-hour stretch.²⁴⁶ That taxpayer simply got fifteen hours of “play” for US\$10. The self-provided service is the length of play. A less skilled (or lucky) taxpayer might lose the entire US\$20 stake in fifteen minutes.²⁴⁷ A more skilled player might cash out when up by C\$1,000 and so report US\$980 income.

Unlike realization arguments, the imputed income approach does not depend on whether the EULA controls the terms of the relationship among players and game owners, or whether the EULA provisions are trumped by common law or statutory rules. If the EULAs control, then their income is imputed service income; if players have property rights in

244. *Zarin v. Comm’r*, 92 T.C. 1084, 1100 (1989), *rev’d on other grounds*, 916 F.2d 110 (3d Cir. 1990).

245. Theodore P. Seto, *Inside Zarin*, 59 S.M.U. L. REV. 1761, 1783 (2006). The use of chips to purchase food, drink, and some services, both inside the casino and outside the casino is a good example of the breach of the magic circle. In Las Vegas, one can take chips from one casino on the strip to another and use them interchangeably. See I.R.S. Field Serv. Advisory (Dec. 28, 1995), 1995 WL 1918359 (discussing outstanding chip and token liability). Although chips thus approach cash equivalency, what they can buy is still so significantly limited, they fall short. Instead of representing the stored value of all the goods and services in a national economy, they just represent the stored value of play. They are, in other words, units of play.

246. *But see* I.R.S. Priv. Ltr. Rul. 05-32-025 (May 3, 2005) (holding that casual game site operator must report as “payments” online credits made to taxpayer’s gaming account, where credits performed same function as casino chips and taxpayer had not yet cashed out). I will discuss the significant implications of this ruling for online casual gaming and online gambling in a future article.

247. Nor does this treatment of casino chips result from application of the realization exception, because the chips have a fixed exchange rate and also, at least in Nevada, the casino is under a legal duty to pay the chips. See I.R.S. Field Serv. Advisory (Dec. 28, 1995), *supra* note 245. So receipt of a casino chip as compensation for services would be income as much as receipt of a “discount” in price is income when given as compensation.

virtual items, then their income derives from self-owned property. Just as ownership of the stage props does not make the staged activity any more “real,” so is the ownership of “virtual items” something of a red herring for taxation. This can be seen better by applying the imputed income analysis to Leeroy and Zelda’s activities in WoW and SL.

The loot drop represents economic income to Leeroy. Section 61 should not reach it, however, because it represents the value of self-provided services. Like a self-prepared tax return has economic value but results from the taxpayer’s own skill-set, so the loot drop results from Leeroy’s WoW-playing skills. Among those are planning ahead, wise use of resources, physical agility, coordination to control his avatar’s moves, and interacting with other players in the virtual world environment (his Guild) to mount a successful quest. All of those skills are self-directed: they give Leeroy more WoW play for his monthly access fee. Even the interaction with other players in the play-market is more properly analogous to the non-taxable activity of carpools or babysitting cooperatives than to barter clubs. All of this is true regardless of whether Leeroy’s owns “virtual items.”

If Leeroy has no rights to his prizes except as provided through the WoW EULA, then his play is like any do-it-yourself homeowner project; it simply enhances the value of his player account, which as discussed above is a chose-in-action. If Leeroy does have rights to these virtual items independent of the EULA such that the non-tax law will treat them “property” in and of themselves (as if they were really tangible personalty), then his play becomes a self-provided service. The function of each item remains limited to use in the virtual world—to quest, to fight, to play at being the top dwarf-paladin in all of Azeroth. Acquisition of virtual items would therefore be like a hunter who takes game, a fisher who takes fish, or a farmer who harvests the crop. They all have imputed income on the realization of each of their items of inventory and are not taxed until their self-obtained inventory is disposed of by a *later* realization event.²⁴⁸

Leeroy’s acquisition of G\$ through in-game transactions is likewise imputed income because the G\$ represent only the stored value of play, a medium which enhances Leeroy’s flexibility in participating in the great improvisation taking place on the virtual stage. Although G\$ has a readily ascertainable fair market value, it does not *function* as currency because it is not the stored value of all the goods and services in the

248. *Morris v. Comm’r*, 9 B.T.A. 1273, 1278 (1928). This result is also implied by Treas. Reg. § 1.61-4(a)(1) (as amended in 1997). See generally Joseph M. Dodge, *Accessions to Wealth, Realization of Gross Income, and Dominion and Control: Applying the ‘Claim of Right Doctrine’ to Found Objects, Including Record-Setting Baseballs*, 4 FLA. TAX REV. 685, 696–97 (2000). Professor Leandra Lederman disagrees with my analysis, arguing that “taken” property is not imputed income. See *supra* note 194.

marketplace.²⁴⁹ It is rather the stored value of an identical set of goods or services in a closed system. It is like a swap of babysitting services, only here it is play services. If he is able to sell either a virtual item for US\$, or his player account for US\$, that is the time when he converts his economic gain in wealth into “gross income” within the meaning of § 61. Cash-out rules.

Zelda’s “sale” of a wedding dress for L\$ should likewise be treated as imputed income, for the same reasons. Zelda is not a wedding dress designer; she simply plays one in Second Life. Her skill in that role results in her ability to play more on the virtual stage of Second Life. She might also play other roles, by playing more than one avatar.²⁵⁰ If she swaps the dress for, say, a thunderstorm, what she receives for the representation of a wedding dress is the representation of something else, a prop. It is a limited unit of play. It is true that Linden Dollars represent a more flexible unit of play than a wedding dress, but so long as the fourth wall holds, they still represent only the stored value of her self-provided service or the benefit of using her self-owned property. There is time enough to tax her when she exchanges her L\$ for US\$ and transforms the self-created value into usable wealth. This is true regardless of Zelda’s intent. Even if she provides in-world programming services for L\$ because she wants to profit from her activities, she still has to cash them out to make them usable wealth. Her intent alone does not transform them into something other than units of play, at least not until they become spendable outside the virtual stage of Second Life.

4. *When Imputed Income Becomes Gross*

In the final analysis, the idea of imputed income is a better guide to an administrable legal definition of “gross income” than is the idea of realization. At some point, in-world activity might well become so connected with real world activity that what is earned or created or traded in-world ought to become “gross income” within the meaning of § 61. I suggest that that point will occur when in-world currency ceases to be mere “units of play” and becomes instead fully functional currency. While it is admittedly a line-drawing problem, I think it is the right line to be looking at, as I hope to illustrate by taking a closer look at Second Life.

Second Life residents make a big deal out of how the TOS gives them “ownership” of virtually represented items. These folks need to

249. This is certainly true for in-world currency vis-à-vis established economies in Europe and North America. Query, however, whether this is as true for less stable currencies. See Kent Ewing, *China's Virtual Currency Threatens the Yuan*, ASIA TIMES ONLINE, Dec. 5, 2005, http://www.atimes.com/atimes/China_Business/HLO5Cbo1.html.

250. See Castronova, *Virtual Worlds*, *supra* note 13, at 24 (finding that players in Everquest played an average of 2.72 avatars).

take a long, deep breath of First Life air. The only “property” they have is the chose-in-action, the right to play, granted through the TOS. The TOS does not grant them anything else. Sure, it allows the residents to *keep* any intellectual property rights for anything they create while in Second Life. But it is federal law which *grants* the rights, not the TOS. The SL TOS simply refrains from making players waive those rights in order to play, in contrast to the WoW TOS which does demand waiver.

Federal copyright law protects “original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.”²⁵¹ But copyright protection does *not* extend to “any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.”²⁵² This statutory language is called the idea/expression dichotomy. Only the expression of the ideas is protected, not the ideas themselves. “[C]opyright assures authors the right to their original expression, but encourages others to build freely upon the ideas and information conveyed by a work.”²⁵³ In general, the more abstract and original the expressive component of the work, the broader the protection, but the more the work is just an expression of commonly accessible factual information, the “thinner” is the copyright protection. There are just too few ways to express a telephone directory, for example, to give much copyright protection for them.²⁵⁴

The holder of a federal copyright gets a bundle of rights.²⁵⁵ Among them are the right to make copies, distribute copies, make derivative works, and display or perform the work publicly, including digital transmission in the case of “literary” works.²⁵⁶ Of potential importance to SL residents is that “computer software” is subject to copyright protection, being considered a subset of “literary works.”²⁵⁷ The term “computer software” is defined broadly as any “set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result.”²⁵⁸ And software is considered “fixed in any tangible medium of expression” when it is stored on a computer hard

251. 17 U.S.C. § 102(a) (2000).

252. *Id.*

253. *Feist Publ'ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 349–50 (1991); *see also Meridian Project Sys. v. Hardin Constr. Co.*, 426 F. Supp. 2d 1101, 1112 (E.D. Cal. 2006) (discussing dichotomy in context of deciding whether end user's copying of software help files infringed copyright).

254. *Feist Publ'ns, Inc.*, 499 U.S. at 362.

255. *Herwig v. United States*, 105 F. Supp. 384, 389 (Ct. Cl. 1952).

256. 17 U.S.C. § 106 (2000).

257. 17 U.S.C. § 101 (2000); H.R. REP. NO. 94-1476, at 54 (1976) (subject matter of copyright includes “literary works” which includes software programs).

258. 17 U.S.C. § 101.

drive or a server or in any other machine-readable form.²⁵⁹

What this means for Zelda and her wedding dress is that she probably has the intellectual property right to copy her wedding dress. Recall that SL players create virtual objects by using a high-level script to manipulate lego-like building blocks called “primitives.” For example, a player could write a short program to create a butterfly that followed his or her avatar around. Although the tools of creation are provided by the game developers and owners, they are immensely powerful. The creation of in-game items is limited largely by player imagination. In-game items are, therefore, quite plausibly works of authorship and expression in which the players can hold a copyright.

Zelda has not only “painted” her dress, and so has the copyright in the representation, she has also likely “scripted” her dress and so has copyright in the script. So she could copy either the dress out on paper, and sell it to a real life dress designer, or she could copy the script and sell that, to other SL residents, for example. It is the latter transaction that I have been using through this Article: when Zelda sells a virtual dress, she is really selling a copy of the script that creates the virtual representation. Sellers like Zelda will generally make the dress customizable. For example, she might well have scripted her dress to change color depending on the color of shoes on the buyer’s avatar. Further, no real life or Second Life dress designer can troll Second Life and copy her dress without Zelda’s permission (which can presumably be purchased).

As a practical matter, the copyright protection for Zelda’s coding is pretty weak. Once Zelda takes her script out of the Second Life environment, it has no value. It won’t produce a dress. The only reason her script produces a dress in Second Life is because the game developers have written or bought a substantial amount of *other* code that takes her script and, step by step, translates it into machine readable form and *then* allows that information to interact with the design and operation of the programming language that creates the SL virtual world. The fantasy wedding dress produced by the script exists in the ballroom of SL. Outside that environment, the script is a pumpkin.

Linden Dollars (L\$) operate the same way as Zelda’s dress. They are programmed to *look* like a medium of exchange but they only function as such within the SL environment. The SL TOS, section 1.4 provides that “Linden Dollars represent a limited license right to use a feature of the simulated environment.”²⁶⁰ That is just another way of

259. Apple Computer, Inc. v. Franklin Computer Corp., 714 F.2d 1240, 1247 (3d Cir. 1983).

260. This is Linden Labs’ consistent position. See Wong, *supra* note 17. Zelda and all the other “residents” of SL have perhaps less rights in L\$ than gamblers have in casino chips. They certainly do not have copy rights, either in the representation of currency (as a number in a certain place on the

saying that Linden Dollars represent units of play.

As long as that is true, and as long as the L\$ is good only on the SL stage, then the fourth wall remains strong. In-world transactions should not be taxed because they produce, at most, imputed income. However, L\$ might morph into real currency. Linden Lab might act differently than its TOS suggests. The Linden Dollar's value in the game requires it to hold a relatively stable value. Too much inflation or deflation will make the game not worth the server time (an update on the old English saying that the game is not worth the candle). An unintended consequence of the game design might be the creation of a new currency—heck, Linden Dollars already have a better exchange rate with the US\$ than most nations.²⁶¹

The breakdown of the magic circle, the feared commodification of virtual worlds, can only come about when, like Pinocchio, the virtual becomes real, when economic activity in Second Life begins to displace economic activity outside Second Life.²⁶² The most likely evidence of that shift will be when account owners gain the ability to trade Linden Dollars for goods and services that are useful outside of Second Life, beyond the fourth wall. Then you will not be able to tell the players from the audience. For example, H&R Block and other companies have established offices in Second Life. Different clothing and car manufacturers have created a presence in Second Life. When those or other businesses start accepting Linden Dollars in payment for tax services or for cars that you can drive on the street of your town, that signals the breach of the fourth wall. When online exchanges outside of Second Life—such as Amazon.com or Staples.com—start accepting payment in Linden Dollars, that will mark the erasing of the magic circle. At that time Second Life will become a barter club and Linden Dollars will cease to be a unit of play and will become like Trade Credits, representing not just the stored value of role-playing but the stored value of all the real corporeal world market has to offer.

Just as with the history of barter club taxation, the operational objections to taxing in-world transactions will cease when the activity rises to a point that the tax administrators can implement a system whereby the income realized can be reliably measured, reported and paid. Whether or when that time will come I have no idea. But that will be when the economic and legal concepts of income will synchronize.

account part of the player's screen) or in the coding that produces the Linden Dollar.

261. For an interesting speculation on how Second Life currency would be treated under the foreign currency rules in the Tax Code, see Steven Chung, *Real Taxation of Virtual Commerce: Has Second Life Crossed the Line?* 13–19 (Spring 2007) (unpublished manuscript, on file with Hastings Law Journal).

262. I am indebted to a conversation with Steven Chung for this idea.

CONCLUSION

On the one hand, this Article is timely. Online worlds involve lots of real money and are absorbing lots of real labor. Where money flows, taxation follows. Currently, although plenty of money is flowing into companies like Blizzard, Inc. (owners of World of Warcraft) and Linden Lab (owners of Second Life), there is no money flowing *within* either virtual world. There are prizes and there are exchanges, but those are all props in a play. No money flows, only virtual representations of money, units of play. If and when players cash out by selling virtual items or player accounts for United States dollars in Real Money Transactions (RMT), that is when the tax collector will be there (virtually speaking), with palm extended. How taxpayers should report their RMT is beyond the scope of this Article. It will depend, in part, on whether they are selling goods or services or whether they are making a sale of a copy or a sale of a copyright. That is all grist for another's mill.

On the other hand, this Article is premature. There is no indication that the IRS is remotely interested in the topic. The subject seems purely academic—and, as I hope you will agree, it is a great academic subject, allowing a fresh look at some very basic tax principles. Yet I can suggest that there are three ways in which the subject might be brought to the attention of the good, hardworking, folks at the IRS. Two are fairly remote. One is not.

First, the issue might arise at the policy level, either at the IRS or Congress. The staff of the Joint Economic Committee (JEC) is in the process of preparing a White Paper on the subject. Although the JEC is not a Committee with jurisdiction over tax statutes, it has an important voice in the process. I think it a very remote possibility that anyone at the policy level will take steps to try and tax in-world transactions. But that is not the real problem for players (or residents) in virtual worlds. Congress enacted § 61 long, long ago and the problem is whether this *existing* law extends to in-world activity.

Second, the issue could come up in audit. If our gamers Leeroy or Zelda were audited, a sharp-eyed Revenue Agent (or one who also played games) might ask to review their online, in-world activity and might conclude that § 61 did indeed reach the loot drop in WoW or the wedding dress sale in SL. Again, however, this is a remote possibility. Not only are audit rates very small, but the IRS almost always pre-identifies issues for the Revenue Agents to look at. Unless there is some third party reporting it, an issue of unreported income will likely be missed.

It is the third-party reporting issue that presents the third and most likely possibility. Section 6041 requires “all persons engaged in a trade or business and making payment in the course of such trade or business to

another person . . . of \$600 or more” to report that payment to the IRS on an information return, usually a Form 1099. Section 6045 imposes the same requirement on any broker, defined as “any . . . person who (for a consideration) regularly acts as a middleman with respect to property or services.” For years, auction site owners like eBay have argued that they are not “brokers” within the meaning of § 6045 and, accordingly, do not have to file information returns.²⁶³ However, the President’s Fiscal Year 2008 budget proposal would expand the scope of § 6045 definition of “broker” to include auction site owners like eBay, and that would likely include virtual item auction sites such as IGE.²⁶⁴

Game developers, particularly Linden Lab, Blizzard, Sony, or other corporations who own and run virtual worlds might well want to know their third-party reporting duties. If players’ trades online constitute taxable transactions and if the loot that game developers award constitute taxable prizes, then the game developers already have a duty under § 6045 to report to the IRS on Form 1099 any payments of more than \$600 to a single player. If the President’s Fiscal Year 2008 budget proposal is enacted into law, then cautious “grey-market” auction site owners might also want a ruling about the tax consequences of virtual property. This is how I would think the issue is most likely to arise in the real world.

Virtual Worlds are exciting places, filled with wonders that saturate the senses. They are commonly viewed as something new. They are not. We have seen virtual worlds before: we call them stages. Nonetheless, since online virtual worlds allow millions of people to role-play in ways that mimic the corporeal world, they do provide opportunity to review some of the basic doctrines of substantive tax law, and to re-explore the connections of those legal doctrines to practicalities of modern tax administration. While they may not be something new under the sun, they may still help us better understand something old: how tax shadows life.

263. See E-mail from Margaret M. Richardson to Eric Soloman and Michael Desmond (Apr. 16, 2007, 2:45 p.m.), in *TAX NOTES TODAY*, Apr. 25, 2007, available at LEXIS, 2007 TNT 80-24.

264. See DEP’T OF THE TREASURY, GENERAL EXPLANATIONS OF THE ADMINISTRATION’S FISCAL YEAR 2008 REVENUE PROPOSALS 65 (2007), available at <http://www.treas.gov/offices/tax-policy/library/bluebk07.pdf>.
